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PATENT APPLICATION
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(Only for new nonprovisional applications under 37 C.F.R. § 1.53 (b))

Attorney Docket No.

LEX-0051-USA

First Inventor or Application
Identifier

Glenn Friedrich et al.

Title

Novel Mutated Mammalian Cells and Animals

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APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents

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Washington, DC 202311 ☐ *Fee Transmittal Form (e.g., PTO/SB/17)
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Pages
(preferred arrangement set forth below)6 Nucleotide and/or Amino Acid Sequence Submission
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- Descriptive title of the Invention
- Cross References to Related Applications
- Statement Regarding Fed sponsored R & D
- Reference to Microfiche Appendix
- Background of the Invention
- Brief Summary of the Invention
- Brief Description of the drawings (if filed)
- Detailed Description
- Claim(s)
- Abstract of the disclosure

a ☐ Computer Readable Copyb. ☒ Paper Copy (identical to computer copy)c ☐ Statement verifying identity of above copies3 ☒ Drawing(s) (35 U.S.C. 113) [Total 15]
Sheets

4. Oath or Declaration [Total 1]

a ☒ Newly unexecuted (original or copy)b. ☐ Copy from a prior application (37 C.F.R. § 1.63(d))
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see 37 C.F.R. §§ 1.63(d)(2) and 1.33(b).**NOTE FOR ITEMS 1 & 13: IN ORDER TO BE ENTITLED TO PAY SMALL ENTITY FEES, A
SMALL ENTITY STATEMENT IS REQUIRED (37 C.F.R. § 1.27), EXCEPT IF
ONE FILED IN A PRIOR APPLICATION IS RELED UPON (37 C.F.R. § 1.28).****ACCOMPANYING APPLICATION PARTS**7 ☐ Assignment Papers (cover sheet & document(s))8. ☐ 37 C.F.R. § 3.73(b) Statement (when there is an assignee) ☐ Power of Attorney9. ☐ English Translation Document (if applicable)10. ☐ Information Disclosure Statement (IDS)/PTO-1449 ☐ Copies of IDS Citations11. ☐ Preliminary Amendment12 ☒ Return Receipt Postcard (MPEP 503)
(Should be specifically itemized)13. ☐ *Small Entity Statement(s) ☐ Statement filed in prior application,
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NOVEL MUTATED MAMMALIAN CELLS AND ANIMALS

The present application claims the benefit of U.S.
5 Provisional Application Ser. No. 60/157,651, filed October 4,
1999, which is herein incorporated by reference in its entirety.
The present application also incorporates U.S. Patent No.
6,080,576 and U.S. Applications Ser. Nos. 08/726,867, 08/728,963,
08/907,598, 08/942,806, 60/109,302, and 09/276,533 and their
10 respective disclosures herein by reference in their entirety.

1.0. FIELD OF THE INVENTION

The present invention is in the field of molecular genetics.
The application discloses novel mutated cells that are generated
15 by process involving the insertion of at least a portion of a
genetically engineered viral vector into the chromosome. The
specifically disclosed recombinant vector allows for the rapid
identification of the gene that has been mutated by using
nucleotide or amino acid sequence information to identify the
20 gene that has been mutated by the vector. When mutated embryonic
stem cell clones are produced, such cells can be used to produce
mutant animals capable of germline transmission of the described
mutated genes.

25 2.0. BACKGROUND OF THE INVENTION

Most mammalian genes are divided into exons and introns.
Exons are the portions of the gene that are spliced into mRNA and
encode the protein product of a gene. In genomic DNA, these
coding exons are often divided by noncoding intron sequences.
30 Although RNA polymerase transcribes both intron and exon
sequences, the intron sequences must be removed from the
transcript so that the resulting mRNA can be translated into
protein. Accordingly, all mammalian, and most eukaryotic, cells
have the machinery to splice exons to produce mRNA. Gene trap
35 vectors have been designed to insert into the introns of genes in
a manner that allows the cellular splicing machinery to splice

vector encoded exons to cellular mRNAs. Commonly, gene trap
vectors contain selectable marker sequences that are preceded by
strong splice acceptor sequences and are not preceded by a
promoter. Thus, when such vectors integrate into a gene, the
5 cellular splicing machinery splices exons from the trapped gene
onto the 5' end of the selectable marker sequence. Typically,
such selectable marker genes can only be expressed if the vector
encoding the gene has integrated into an intron. The resulting
gene trap events are subsequently identified by selecting for
10 cells that can survive selective culture.

Gene trapping has generally proven to be an efficient method
of mutating large numbers of genes. The insertion of the gene
trap vector creates a mutation in the trapped gene, and also
provides a molecular tag for ease of identifying the gene that
15 has been trapped. When ROSA β geo was used to trap genes it was
demonstrated that at least 50% of the resulting mutations
resulted in a phenotype when examined in mice. This indicates
that the gene trap insertion vectors are useful mutagens.
Although a powerful tool for mutating genes, the potential of the
20 method has historically been limited by the difficulty in
identifying the trapped genes. Methods that have been used to
identify trap events rely on the fusion transcripts resulting
from the splicing of exon sequences from the trapped gene to
sequences encoded by the gene trap vector. Common gene
25 identification protocols used to obtain sequences from these
fusion transcripts include 5' RACE, cDNA cloning, and cloning of
genomic DNA surrounding the site of vector integration. However,
these methods have proven labor intensive, not readily amenable
to automation, and generally impractical for high-throughput.

30 More recently, vectors have been developed that rely on a
new strategy of gene trapping that uses a vector that contains a
selectable marker gene preceded by a promoter and followed by a
splice donor sequence instead of a polyadenylation sequence.
These vectors do not provide selection unless they integrate into

a gene and subsequently trap downstream exons which provide a polyadenylation sequence. Integration of such vectors into the chromosome results in the splicing of the selectable marker gene to 3' exons of the trapped gene. These vectors provide a number of advantages. They can be used to trap genes regardless of whether the genes are normally expressed in the cell type in which the vector has integrated. In addition, cells harboring such vectors can be screened using automated (e.g., 96-well plate format) gene identification assays such as 3' RACE (see generally, Frohman, 1994, PCR Methods and Applications, 4:S40-S58). Using these vectors it is possible to produce large numbers of mutations and rapidly identify the mutated, or trapped, gene by DNA sequence analysis.

3.0. SUMMARY OF THE INVENTION

The subject invention provides numerous isolated mammalian mutant cell clones that are each characterized by the insertion of a mutagenic genetically engineered polynucleotide sequence into a gene identifiable as corresponding to one or more of the OMNIBANK gene trapped sequences (GTSS) disclosed in Sequence Listing.

The subject invention further contemplates a mutated cell, and particularly a mutated ES cell, and the animals derived from such ES cell that stably maintain a genetically engineered mutation in a gene identifiable as corresponding to one of the disclosed GTSS.

4.0. DESCRIPTION OF THE SEQUENCE LISTING AND FIGURES

The Sequence Listing is a compilation of nucleotide sequences obtained by sequencing clonal lines of gene trapped murine ES cells.

Figures 1A-1C present a diagrammatic representation of representative gene trap vectors used to generate the described sequences.

Figure 2 provides an index to the Sequence Listing and the corresponding database accession numbers for the genes that have been mutated according to the present invention.

5 **5.0. DETAILED DESCRIPTION OF THE INVENTION**

 The current invention relates to novel mutated mammalian cells that are each characterized by the insertion of a recombinant (*i.e.*, genetically engineered) mutagenic polynucleotide sequence into a gene identifiable as corresponding
10 to one of the GTSS of SEQ ID NOS: 1-574.
For the purposes of the present invention, the term "identifiable" is to be construed as indicating that a mammalian cell, and preferably, a murine ES cell, has been mutated by the insertion of a polynucleotide sequence of recombinantly
15 manipulated origin at a genetic locus that normally comprises polynucleotide sequence, and/or post-spliced exonic sequence, that is at least partially described in one of the GTSS of Sequence Listing. One method of determining whether one of the described mutated mammalian cells has a mutation in a gene of
20 interest is by comparing the polynucleotide sequence (or a corresponding amino acid sequence) of the GTS identifying the mutated locus to the full length sequence of the gene.
Alternatively, such searches can be conducted by comparing the described GTS sequence to a well known database (such as, but not
25 limited to GENBANK) using established computer algorithms including, but not limited to, BLASTX, FASTA, BLASTN, BLASTP, TBLASTN, and TBLASTX using the default parameters used, for example, at the National Center for Biotechnology Information web site (www.ncbi.nlm.nih.gov). The GTSS reported in the Sequence
30 Listing have been compared to such a database (GENBANK), and the accession numbers of the genes that have been mutated are presented in Figure 2. Accordingly, an additional aspect of the subject invention includes mutated mammalian, preferably murine, cells, or isolated cell lines, that have at least one engineered

mutation in a gene identified by GENBANK or GENESEQ (for example) accession number in Figure 2.

As used herein, the terms "mutated" or "mutation" mean that the genetic locus has been altered by a process involving the integration or incorporation of a genetically engineered polynucleotide sequence into the genome of the cell with the result that the subsequent levels of activity of the product normally encoded by the locus is altered (*i.e.*, reduced, increased, or substantially ablated). In those instances where the mutation substantially completely disrupts the expression or activity of the product normally encoded by the locus (*i.e.*, a null mutation), a cell that is heterozygous for the mutated allele will typically produce about one half of the product of a nonmutated cell (via a gene dosage effect), and about twice the amount of product produced by a cell that is homozygous for the mutant allele.

The term "recombinantly manipulated" shall mean that such compositions comprising such molecules or polynucleotides have been genetically engineered using molecular biology methodologies *in vitro* or *ex vivo* (see generally, Sambrook *et al.*, 1989, Molecular Cloning, A Laboratory Manual, Cold Springs Harbor Press, N.Y.; and Ausubel *et al.*, 1989, Current Protocols in Molecular Biology, Green Publishing Associates and Wiley Interscience, N.Y.).

Where, the specifically exemplified mammalian cells, *i.e.*, embryonic stem cells (Lex-1 cells from murine strain A129), are mutated by a process involving the insertion of at least a portion of a genetically engineered vector sequence into the gene of interest, the mutated embryonic stem cells can be microinjected into blastocysts which are subsequently introduced into pseudopregnant female hosts and carried to term using established methods such as those described in, for example, "Mouse Mutagenesis", 1998, Zambrowicz *et al.*, eds., Lexicon Press, The Woodlands, TX, and periodic updates thereof, herein

incorporated by reference. The resulting chimeric animals are subsequently bred to produce offspring capable of germline transmission of an allele containing the engineered mutation in the gene of interest.

5 An alternative method of producing mutated cells and animals in the specifically exemplified genes involves the process of gene targeting by homologous recombination using methods such as those exemplified in U.S. Application Ser. No. 09/171,642, which is herein incorporated by reference in its entirety. Mutations
10 produced using such methods include, but are not limited to knockout mutations, "knockin" mutations (where a human gene, for example, is used to replace its murine orthologs), can be conditional, can include point mutations, and mutations that activate gene expression. Some of the mutations described above
15 (conditional mutations, point mutations, etc.) can be produced via processes that involve the substantial removal of vector encoded sequences (often recombines mediated) subsequent to the incorporation of the recombinantly manipulated sequences into the genome.

20 **5.1. MUTATED MAMMALIAN CELLS OF THE PRESENT INVENTION**

The presently described mutated cells have genetically engineered mutations in genes identifiable as corresponding to, or normally comprising, at least a portion of a sequence reported in the
25 Sequence Listing as SEQ ID NOS: 1-574. Additional embodiments of the present invention are cells comprising engineered mutations in homologs, paralogs, orthologs, etc., of the mutated genes disclosed in the Sequence Listing. Such homologs, paralogs, and orthologs include genes having sequences that hybridize to one or
30 more of the disclosed GTSS of SEQ ID NOS: 1-574 under stringent, or preferably highly stringent, conditions. Hybridization conditions also provide an alternative means of identifying the mutated genes corresponding to the GTSS reported in the sequence listing. Typically, such genes will be identifiable because a

disclosed GTS, or portion thereof, shall hybridize to the gene under stringent conditions.

By way of example and not limitation, high stringency hybridization conditions can be defined as follows:

- 5 Prehybridization of filters containing DNA to be screened is carried out for 8 h to overnight at 65°C in a buffer containing 6X SSC, 50mM Tris-HCl (pH 7.5), 1mM EDTA, 0.02% PVP, 0.02% Ficoll, 0.02% BSA, and 500 µg/ml denatured salmon sperm DNA. Filters are hybridized for 48 h at 65°C in prehybridization
- 10 mixture containing 100µg/ml denatured salmon sperm DNA and 5-20 x 10⁶ cpm of ³²P-labeled probe (alternatively, as in all hybridizations described herein, approximately 42, 44, 46, 48, 50, 52, 54, 56, 58, 62, 64, 66, 68, 70, or about 72 degrees or more can be used). The filters are then washed in approximately
- 15 1X wash mix (10X wash mix contains 3M NaCl, 0.6M Tris base, and 0.02M EDTA, alternatively, as with all washes described herein, 2X, 3X, 4X, 5X, 6X wash mix, or more, can be used) twice for 5 minutes each at room temperature, then in 1X wash mix containing 1% SDS at 60°C (alternatively, as in all washes described herein,
- 20 approximately 42, 44, 46, 48, 50, 52, 54, 56, 58, 62, 64, 66, 68, 70, or about 72 degrees or more can be used) for about 30 min, and finally in 0.3X wash mix (alternatively, as in all final washes described herein, approximately, 0.2X, 0.4X, 0.6X, 0.8X, 1X, or any concentration between about 2X and about 6X can be
- 25 used in conjunction with a suitable wash temperature) containing 0.1% SDS at 60°C (alternatively, approximately 42, 44, 46, 48, 50, 52, 54, 56, 58, 62, 64, 66, 68, 70, or about 72 degrees or more can be used) for about 30 min. The filters are then air dried and exposed to x-ray film for autoradiography. In an
- 30 alternative protocol, washing of filters is done for 37°C for 1 h in a solution containing 2X SSC, 0.01% PVP, 0.01% Ficoll, and 0.01% BSA. This is followed by a wash in 0.1X SSC at 50°C for 45 min before autoradiography. Another example of hybridization under highly stringent conditions is hybridization to filter-

bound DNA in 0.5 M NaHPO₄, 7% sodium dodecyl sulfate (SDS), 1 mM EDTA at 65°C, and washing in 0.1xSSC/0.1% SDS at 68°C (Ausubel F.M. *et al.*, eds., 1989, Current Protocols in Molecular Biology, Vol. I, Green Publishing Associates, Inc., and John Wiley & sons, Inc., New York, at p. 2.10.3).

Alternatively, moderately stringent conditions can be used (e.g., washing in 0.2xSSC/0.1% SDS at 42° C (Ausubel *et al.*, 1989, *supra*). Moderately stringent conditions can be additionally defined, for example, as follows: Filters containing DNA are pretreated for 6 h at 55°C in a solution containing 6X SSC, 5X Denhart's solution, 0.5% SDS and 100 µg/ml denatured salmon sperm DNA. Hybridizations are carried out in the same solution and 5-20 x 10⁶ cpm ³²P-labeled probe is used. Filters are incubated in hybridization mixture for 18-20 h at 55°C (alternatively, as in all hybridizations described herein, approximately 42, 44, 46, 48, 50, 52, 54, 56, 58, 62, 64, 66, 68, 70, or about 72 degrees or more can be used in combination with a suitable concentration of salt). The filters are then washed in approximately 1X wash mix (10X wash mix contains 3M NaCl, 0.6M Tris base, and 0.02M EDTA, alternatively, as with all washes described herein, 2X, 3X, 4X, 5X, 6X wash mix, or more, can be used) twice for 5 minutes each at room temperature, then in 1X wash mix containing 1% SDS at 60°C (alternatively, as in all washes described herein, approximately, 42, 44, 46, 48, 50, 52, 54, 56, 58, 62, 64, 66, 68, 70, or about 72 degrees or more can be used) for about 30 min, and finally in 0.3X wash mix (alternatively, as in all final washes described herein approximately 0.2X, 0.4X, 0.6X, 0.8X, 1X, or any concentration between about 2X and about 6X can be used in conjunction with a suitable wash temperature) containing 0.1% SDS at 60°C (alternatively, approximately 42, 44, 45, 48, 50, 52, 54, 56, 58, 62, 64, 66, 68, 70, or about 72 degrees or more can be used) for about 30 min. The filters are then air dried and exposed to x-ray film for autoradiography.

In an alternative protocol, washing of filters is done twice for 30 minutes at 60°C in a solution containing 1X SSC and 0.1% SDS. Filters are blotted dry and exposed for autoradiography.

Other conditions of moderate stringency which may be used are well-known in the art. For example, washing of filters can be done at 37°C for 1 h in a solution containing 2X SSC, 0.1% SDS. Another example of hybridization under moderately stringent conditions is washing in 0.2xSSC/0.1% SDS at 42°C (Ausubel et al., 1989, *supra*). Such less stringent conditions may also be, for example, low stringency hybridization conditions. By way of example and not limitation, procedures using such conditions of low stringency are as follows (see also Shilo and Weinberg, 1981, Proc. Natl. Acad. Sci. USA 78:6789-6792): Filters containing DNA are pretreated for 6 h at 40°C in a solution containing 35% formamide, 5X SSC, 50mM Tris-HCl (pH 7.5), 5mM EDTA, 0.1% PVP, 0.1% Ficoll, 1% BSA, and 500 µg/ml denatured salmon sperm DNA. Hybridizations are carried out in the same solution with the following modifications: 0.02% PVP, 0.02% Ficoll, 0.2% BSA, 100µg/ml salmon sperm DNA, 10% (wt/vol) dextran sulfate, and 5-20 X 10⁶ cpm ³²P-labeled probe is used. Filters are incubated in hybridization mixture for 18-20 h at 40°C (alternatively, as in all hybridizations described herein, approximately 42, 44, 46, 48, 50, 52, 54, 56, 58, 62, 64, 66, 68, 70, or about 72 degrees or more can be used). The filters are then washed in approximately 1X wash mix (10x wash mix contains 3M NaCl, 0.6M Tris base, and 0.02M EDTA, alternatively, as with all washes described herein, 2X, 3X, 4X, 5X, 6X wash mix, or more, can be used) twice for five minutes each at room temperature, then in 1X wash mix containing 1% SDS at 60°C (alternatively, as in all washes described herein, approximately 42, 44, 46, 48, 50, 52, 54, 56, 58, 62, 64, 66, 68, 70, or about 72 degrees or more can be used) for about 30 min, and finally in 0.3X wash mix (alternatively, as in all final washes described herein, approximately, 0.2X, 0.4X, 0.6X, 0.8X, 1X, or any concentration

between about 2X and about 6X can be used in conjunction with a suitable wash temperature) containing 0.1% SDS at 60°C (alternatively, approximately 42, 44, 46, 48, 50, 52, 54, 56, 58, 62, 64, 66, 68, 70, or about 72 degrees or more can be used) for about 30 min. The filters are then air dried and exposed to x-ray film for autoradiography. In yet another alternative protocol, washing of filters is done for 1.5 h at 55°C in a solution containing 2X SSC, 25mM Tris-HCl (pH 7.4), 5mM EDTA, and 0.1% SDS. The wash solution is replaced with fresh solution and incubated an additional 1.5 h at 60°C. Filters are then blotted dry and exposed for autoradiography. If necessary, filters are washed for a third time at 65-68°C and reexposed to film. Other conditions of low stringency which may be used are well known in the art (e.g., as employed for cross-species hybridizations). Preferably, GTS variants identified or isolated using the above methods will also encode a functionally equivalent gene product (i.e., protein, polypeptide, or domain thereof, encoding or otherwise associated with a function or structure at least partially encoded by the complementary GTS).

Low stringency conditions are well known to those of skill in the art, and will vary predictably depending on the specific organisms from which the library and the labeled sequences are derived. For guidance regarding such conditions see, for example, Sambrook *et al.*, 1989, *Molecular Cloning, A Laboratory Manual*, Cold Springs Harbor Press, N.Y.; and Ausubel *et al.*, 1989, *Current Protocols in Molecular Biology*, Green Publishing Associates and Wiley Interscience, N.Y.

The identification of homologs, heterologs, or paralogs of SEQ ID NOS: 1-574 in other, preferably related, species can be useful for developing additional animal model systems that are closely related to humans for purposes of drug discovery. Genes at other genetic loci within the genome that encode proteins which have extensive homology to one or more domains of the gene products encoded by SEQ ID NOS: 1-574 can also be identified via

similar techniques. In the case of cDNA libraries, such screening techniques can identify clones derived from alternatively spliced transcripts in the same or different species.

5 Techniques useful to disrupt a gene in a cell and especially an ES cell that may already have a disrupted gene are disclosed in copending US patent applications Nos. 08/726,867; 08/728,963; 08/907,598; and 08/942,806, all of which are hereby incorporated herein by reference in their entirety, are within the scope of
10 the current invention to disrupt a gene that encodes a polynucleotide of the current invention.

5.2. USES OF THE DESCRIBED MUTATED GENES AND ANIMALS

The described mutated cells and animals are used to
15 investigate and define the cellular and biological functions of the mutated genes. Producing a scientific model that accurately accounts for the large number of genes, proteins, and macromolecules within a single cell has thus far proved beyond the capabilities of existing computer technology. It should thus
20 not be surprising that the far more complex task of modeling the various intricacies, cross and direct redundancies, and interrelated functions of the various metabolic and catabolic processes that occur within a single cell has also proven largely intractable to algorithmic methods of modeling and prediction.
25 Even if one assumes that computer modeling of inherently chaotic/heuristic processes will rapidly mature in the near future, such methods, at best, can only provide predictions that subsequently require practical validation. Several decades of empirical data have proven that mutant phenotypes provide a
30 valuable source of such validation.

The mutated diploid mammalian cells of the present invention will initially exist as mutated diploid cells that are heterozygous (except where genes on the X or Y chromosomes are mutated) for the mutations identified in the sequence listing.

As such, via a "gene dosage" effect, the mutated cells can typically be characterized by the fact that they produce about one half of the mutated transcript/activity relative to cells having two nonmutated or wild type copies of the corresponding gene.

When mutant animals are produced from the mutated cells, heterozygous animals capable of germline transmission of the mutated allele can be bred to produce embryos or offspring that are homozygous for the mutant allele. Such animals or embryos are a rich source of tissues and cells that do not express physiologically relevant amounts of the mutated genes or activities encoded thereby. Accordingly, an additional embodiment of the present invention are mutant cells and animals that have homozygous mutations in genes identifiable as corresponding to the GENBANK, or other database accession, numbers provided in Figure 2, or are identifiable as a homologs, paralog, or orthologs of a sequence provided in the Sequence Listing.

In addition to providing important information regarding the functional role of a given gene in its nonmutated state (*i.e.*, you learn about the function of the gene by discerning the effects of reducing or ablating the activity normally encoded by the gene), the described mutated cells and animals can be used as disease models, or in assays for compounds or genes (via gene delivery or transgenic methods) that compensate for the mutant phenotype and that can be used to treat diseases and disorders related to the observed phenotype. Alternatively, such products and genes can also be used to enhance desirable, if not normal, symptoms related to the observed phenotypes.

The gene replacement/delivery therapies described above should be capable of delivering gene sequences to the cell types within patients which express the peptide or protein having the desired activity.

The examples below are provided to illustrate the subject invention. These examples are provided by way of illustration and are not included for the purpose of limiting the invention in any way whatsoever.

5

6.0. EXAMPLES

6.1. GENERATION OF A LIBRARY OF MUTATED MOUSE ES CELLS DEFINED BY GTS SEQUENCES

10 The retroviral vector VICTR 3, described in detail in U.S. application Ser. No. 08/728,963, filed October 11, 1996, was used to generate a library of gene trapped ES cell clones that represent a portion of the described GTSs. A plasmid containing the VICTR 3 cassette was constructed by conventional cloning
15 techniques and designed to employ the features described above. Namely, the cassette contained a *PGK* promoter directing transcription of an exon that encodes the *puro* marker and ends in a canonical splice donor sequence. At the end of the puromycin exon, sequences were added as described that allow for the
20 annealing of two nested PCR and sequencing primers. The vector backbone was based on pBluescript KS+ from Stratagene Corporation.

 The plasmid construct was linearized by digestion with *Sca* I which cuts at a unique site in the plasmid backbone. The plasmid
25 was then transfected into the mouse ES cell line AB2.2 by electroporation using a BioRad Genepulser apparatus. After the cells were allowed to recover, gene trap clones were selected by adding puromycin to the medium at a final concentration of 3 μ g/ml. Positive clones were allowed to grow under selection for
30 approximately 10 days before being removed and cultured separately for storage and to determine the sequence of the disrupted gene.

 Total RNA was isolated from an aliquot of cells from each of 18 gene trap clones chosen for study. Five micrograms of this
35 RNA was used in a first strand cDNA synthesis reaction using the

"RS" primer. This primer has unique sequences (for subsequent PCR) on its 5' end and nine random nucleotides or nine T (thymidine) residues on its 3' end. Reaction products from the first strand synthesis were added directly to a PCR with outer primers specific for the engineered sequences of puromycin and the "RS" primer. After amplification, an aliquot of reaction products were subject to a second round of amplification using primers internal, or nested, relative to the first set of PCR primers. This second amplification provided more reaction product for sequencing and also provided increased specificity for the specifically gene trapped DNA.

The products of the nested PCR were visualized by agarose gel electrophoresis, and seventeen of the eighteen clones provided at least one band that was visible on the gel with ethidium bromide staining. Most gave only a single band which is an advantage in that a single band is generally easier to sequence. The PCR products were sequenced directly after excess PCR primers and nucleotides were removed by filtration in a spin column (Centricon-100, Amicon). DNA was added directly to dye terminator sequencing reactions (purchased from ABI) using the standard M13 forward primer a region for which was built into the end of the puro exon in all of the PCR fragments.

Subsequent studies have used both VICTR 3 and VICTR 20. Like VICTR 3, VICTR 20 is exemplary of a family of vectors that incorporate two main functional units: a sequence acquisition component having a strong promoter element (phosphoglycerate kinase 1) active in ES cells that is fused to the puromycin resistance gene (or other exon sequence) that is followed by a synthetic consensus splice donor (SD) sequence and lacks an operatively positioned polyadenylation sequence downstream from the SD sequence (PGKpuroSD); and 2) a mutagenic component that incorporates a splice acceptor sequence fused to a selectable and/or colorimetric marker gene and followed by a polyadenylation

sequence (for example, SA β geopA, SaneopA, SAIRESneopA, or SAIRES β geopA).

Also like VICTR 3, stop codons have been engineered into all three reading frames in the region between the 3' end of the selectable marker and the splice donor site. A diagrammatic description of structure and functions of VICTRs 3 and 20 is provided in Figure 1.

When VICTRs 3, 20, and various variations thereof such as the vectors and methods described in U.S. Applications Ser. Nos. 09/276,533, and 60/095,989 (the disclosures of which are herein incorporated by reference), were used in the commercial scale application of the presently disclosed invention, many mutagenized ES cell clones were rapidly engineered and obtained. Sequence analysis obtained from these clones has identified a wide variety of sequences. Each of the sequences presented in SEQ ID NOS: 1-574 identify novel mutations in the coding regions of mammalian genes that identifiable as corresponding to the sequences presented in the Sequence Listing. Alternatively, the described mutated cells are described by the database (GENBANK, GENSEQ, etc.) accession numbers for the corresponding genes that have been mutated (see Figure 2). The described mutated cells, and preferably ES cells, provide a valuable resource for defining, evaluating, or validating the biological function or disease/pharmaceutical relevance of each of these genes.

The cloned 3' RACE products resulting after the target ES cells were infected with one of the described gene trap vectors were purified using conventional column chromatography, (e.g., S300 and G-50 columns), and the products were recovered by centrifugation. Purified PCR products were quantified by fluorescence using PicoGreen (Molecular Probes, Inc., Eugene Oregon) as per the manufacturer's instructions.

Dye terminator cycle sequencing reactions with AmpliTaq® FS DNA polymerase (Perkin Elmer Applied Biosystems, Foster City, CA) were carried out using approximately 7 pmoles of sequencing

primer, and approximately 30-120 ng of 3' template.

Unincorporated dye terminators were removed from the completed sequencing reactions using G-50 columns as described above. The reactions were dried under vacuum, resuspended in loading buffer, and electrophoresed through a 6% Long Ranger acrylamide gel (FMC BioProducts, Rockland, ME) on an ABI Prism® 377 with XL upgrade as per the manufacturer's instructions. The sequences of the resulting amplicons, or GTSSs, are described in SEQ ID NOS: 1-574.

All publications and patents mentioned in the above specification are herein incorporated by reference. Various modifications and variations of the described method and system of the invention will be apparent to those skilled in the art without departing from the scope and spirit of the invention. Although the invention has been described in connection with specific preferred embodiments, it should be understood that the invention as claimed should not be unduly limited to such specific embodiments. Indeed, various modifications of the above-described modes for carrying out the invention which are obvious to those skilled in the field of molecular biology or related fields are intended to be within the scope of the following claims.

CLAIMS

WHAT IS CLAIMED IS:

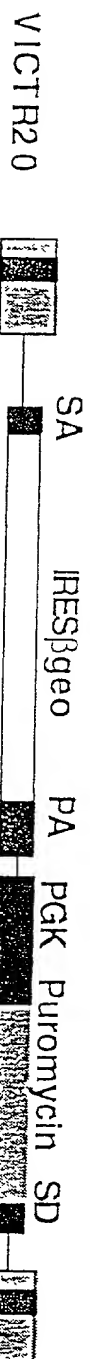
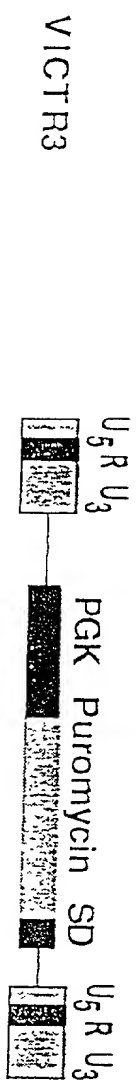
1. A genetically engineered mammalian cell that has been
5 mutated by a process comprising the insertion of a recombinantly
manipulated polynucleotide sequence into a gene in said
genetically engineered mammalian cell wherein said gene is
identifiable as corresponding to at least one of SEQ ID NOS: 1-
574.
- 10
2. The genetically engineered mammalian cell of Claim 1,
wherein said cell is murine.
3. A cell according to Claim 2, wherein said cell is an
15 embryonic stem cell.
4. The genetically engineered mammalian cell of Claim 1,
wherein said polynucleotide sequence is present on a viral
vector.
- 20
5. A cell according to Claim 4, wherein said viral vector
is a retroviral vector.
6. A cell according to Claim 4, wherein said viral vector
25 additionally comprises regions of targeting DNA that facilitate
gene targeting by homologous recombination.
7. An isolated murine embryonic stem cell line comprising
an engineered retroviral gene trap vector in at least one gene
30 comprising a polynucleotide sequence first disclosed in one of
SEQ ID NOS: 1-574.

ABSTRACT

Novel mutated mammalian cells are provided that have been characterized by identifying the sequence of the genes that have been mutated. Preferably, novel mutated cells are murine ES cells that stably incorporate retroviral gene trap constructs in the specifically identified genes. The novel mutated cells and animals are useful in functional genomic analysis, and in the discovery and development of new therapeutic and diagnostics agents and methods.

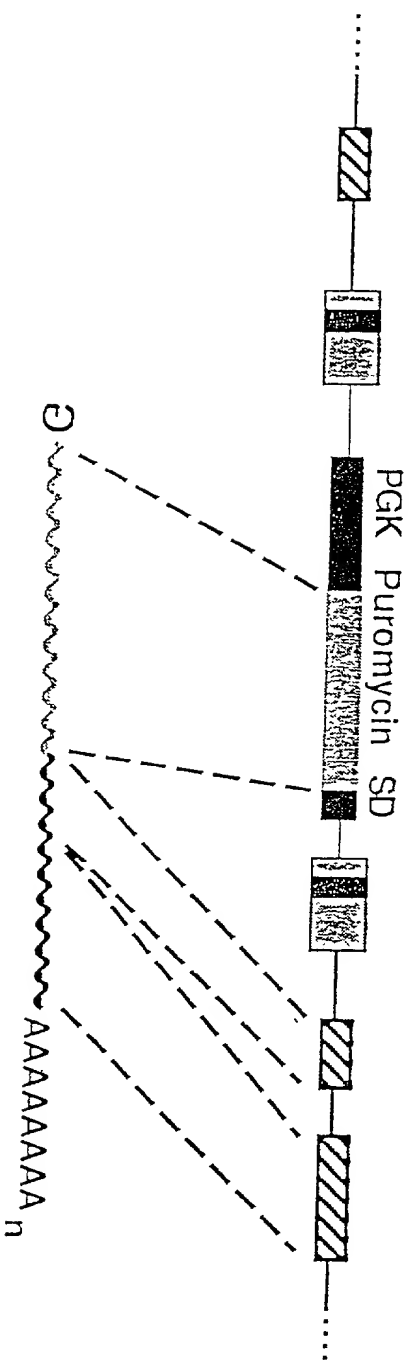
10

A

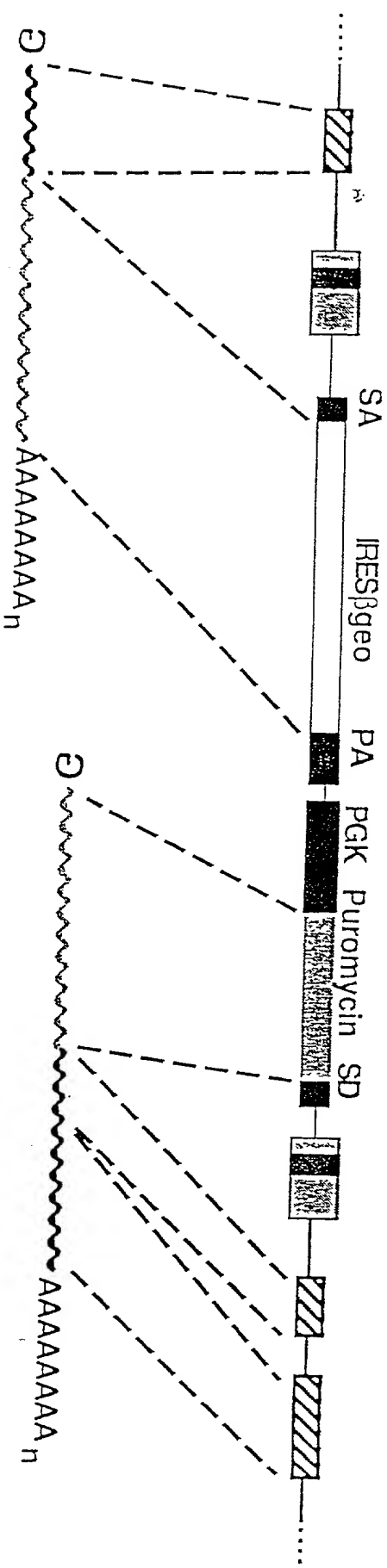


B

Wildtype Locus [diagram of wildtype locus with several exons and introns]



C



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FIGURE 2

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FIGURE 2

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FIGURE 2

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 OST97510 OC17796 (Similar To: AA038392) Thu Sep 30 14:38:14 1999
 OST97536 OC17798 (Similar To: AC002324) Thu Sep 30 14:38:14 1999
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FIGURE 2

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 OST98663 OC17959 (Similar To: AA111281) Thu Sep 30 14:38:14 1999
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 OST98746 OC17967 (Similar To: AF074266) Thu Sep 30 14:38:14 1999
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FIGURE 2

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 OST100774 OC18254 (Similar To: AC005742) Thu Sep 30 14:38:14 1999
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FIGURE 2

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8 of 14

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FIGURE 2
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PATENT APPLICATION

DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION

ATTORNEY DOCKET NO. LEX-0051-USA

As a below named inventor, I hereby declare that:

My residence/post office address and citizenship are as stated below next to my name;

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

Novel Mutated Mammalian Cells and Animals

the specification of which is attached hereto unless the following box is checked:

() was filed on _____ as US Application Serial No. or PCT International Application
Number _____ and was amended on _____ (if applicable).

I hereby state that I have reviewed and understood the contents of the above-identified specification, including the claims, as amended by any amendment(s) referred to above. I acknowledge the duty to disclose all information which is material to patentability as defined in 37 CFR 1.56.

Foreign Application(s) and/or Claim of Foreign Priority

I hereby claim foreign priority benefits under Title 35, United States Code Section 119 of any foreign application(s) for patent or inventor(s) certificate listed below and have also identified below any foreign application for patent or inventor(s) certificate having a filing date before that of the application on which priority is claimed:

| COUNTRY | APPLICATION NUMBER | DATE FILED | PRIORITY CLAIMED UNDER 35 U.S.C. 119 |
|---------|--------------------|------------|--------------------------------------|
| | | | YES: _____ NO: _____ |
| | | | YES: _____ NO: _____ |

Provisional Application

I hereby claim the benefit under Title 35, United States Code Section 119(e) of any United States provisional application(s) listed below:

| APPLICATION SERIAL NUMBER | FILING DATE |
|---------------------------|-------------|
| 60/157,651 | 10/4/1999 |
| | |

U.S. Priority Claim

I hereby claim the benefit under Title 35, United States Code, Section 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code Section 112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, Section 1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

| APPLICATION SERIAL NUMBER | FILING DATE | STATUS(patented/pending/abandoned) |
|---------------------------|-------------|------------------------------------|
| | | |
| | | |
| | | |

POWER OF ATTORNEY:

As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) listed below to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

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I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

**DECLARATION AND POWER OF ATTORNEY
FOR PATENT APPLICATION (continued)**

ATTORNEY DOCKET NO. LEX-0051-USA

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Inventor's Signature Date

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Post Office Address: Same

Inventor's Signature Date

Full Name of Inventor: Arthur T. Sands Citizenship: USA

Residence: 163 Bristol Bend Circle, The Woodlands, TX 77382

Post Office Address: Same

Inventor's Signature Date

SEQUENCE LISTING

<110> Friedrich, Glenn
Zambrowicz, Brian
Sands, Arthur T.

<120> Novel Mutated Mammalian Cells and
Animals

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<221> misc_feature

<222> (1)...(442)

<223> n = A,T,C or G

<400> 1

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| aggcagccat | cttctcctcc | ctcgatcatc | ttttccatcc | agatgcaagt | cgtgggagct | 60 |
| ganagctcgg | acnagggtga | gattgccgcc | ttccctccga | cccgaacgcg | tgcgccccgc | 120 |
| cggccccccg | ctgggtgcac | actcgcacgc | acaccctcgc | accatacccc | gcacacncgg | 180 |
| gagcacacgc | acaggtantc | agtcacacac | caagggcagc | agcgacggcg | gacnaaacat | 240 |
| gctccggtgg | cattgcaacc | ccccacccc | cgccatccaa | ccttgcaatt | cntttgcagt | 300 |
| cagaccccaa | accccacacc | ttccccggag | ccccctcca | taaaaaantg | ccttcccccc | 360 |
| aaaacacacn | cgcacacntn | acncaaannt | ngganaatgg | accgacagaa | aatntttttg | 420 |
| gcaaatgctc | catcaaaagg | gc | | | | 442 |

<210> 2

<211> 238

<212> DNA

<213> Mus musculus

<400> 2

| | | | | | | |
|------------|------------|------------|-------------|------------|------------|-----|
| gcttttagcc | aaaaaatcaa | tgaaccagta | agttgcattc | gaaacggagg | catatgccag | 60 |
| tatcggtgca | ttggccttag | gcataagatt | ggaacttggtg | gatctccttt | caaagtctgc | 120 |
| aagtgataat | agagaagaca | aagatcctgc | aaaccaaaga | aaacaccaga | attttttcct | 180 |
| ccatgaagat | ggacaaaact | taaaccaa | ttaaagtttct | tgattaaatg | caaacact | 238 |

<210> 3

<211> 310

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(310)

<223> n = A,T,C or G

<400> 3

| | | | | | | |
|-------------|-------------|------------|------------|------------|------------|-----|
| atgggtctca | cggccaagga | nctgggaggc | ctccgatgac | tcttcagcaa | ggtgtacaaa | 60 |
| gccaaagtacc | cattgtttggc | tacacagccc | gaangatcct | caacgaggat | ggcagcccca | 120 |

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| acctggactt | caagcctgaa | gaccagcccc | atTTtgacat | aaaggacgaa | ttctgatgtc | 180 |
| tagctgagaa | gcagccggtt | ctagggagaa | gtgaggggac | aggagttaag | tgTccctcgg | 240 |
| aacaagcggg | ggaagcctcc | gagtgcctcg | cagctgaata | aagcgaatgt | ttactggga | 300 |
| aaaaaaaa | | | | | | 310 |

<210> 4
 <211> 468
 <212> DNA
 <213> Mus musculus

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| <400> 4 | | | | | | |
| ggaattcgat | atcaagctta | ccatgaacga | gtacaagccc | acggtgcgcc | tcgccacccg | 60 |
| cgacgacgtc | cccagggggc | gtacgcaccc | tcgccgccgc | gttcgccgac | taccccgcca | 120 |
| cgcgccacac | cgtcgatccg | gaccgccaca | tcgagcgggt | caccgagctg | ctgatgcaga | 180 |
| gaattgagca | gctttaaatt | tagatttcaa | tatttgagag | aaatcagtaa | atgttcatac | 240 |
| tcgttaacta | tgtcaaactt | tttatTTtat | aaaatatagt | ctgctaatat | gtatatTggc | 300 |
| ataagaattc | ccaacagcat | tttatgactc | cttgggTtta | aaacctcagt | attaaattta | 360 |
| tcagtgtttg | tggtgcagca | catttaagtt | caacatagtc | cacacatttt | gttgaagaa | 420 |
| gttttcaaat | aaaaagcgcg | agttggattt | ttcccattaa | aaaaaaaa | | 468 |

<210> 5
 <211> 283
 <212> DNA
 <213> Mus musculus

| | | | | | | |
|------------|-------------|-------------|------------|------------|------------|-----|
| <400> 5 | | | | | | |
| agaccagaca | gtctggagta | ttatcttgaa | gtaatacatt | gcccgaacaa | tgtgcaagaa | 60 |
| gattgcagga | gataatgaaa | actgcttggt | tcaacaggat | cctaaaatga | aaaagatggT | 120 |
| gttttgcatT | tttatTgtta | gtcctcaaacc | atggaagttt | gaacttaaaa | tgtgcaagaa | 180 |
| gcaatgcaaa | gatatctaatt | cagcattcgg | gacacctTgc | cactcttact | tttcttttaa | 240 |
| ctgaataaag | atgcttgtaa | gatagtggac | caccacaaaa | aaa | | 283 |

<210> 6
 <211> 252
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(252)
 <223> n = A,T,C or G

| | | | | | | |
|------------|------------|------------|-------------|-------------|------------|-----|
| <400> 6 | | | | | | |
| cttcactttc | agctgctgcc | ggctgccacc | cttgccaccag | ctnaaccanc | agngcctgct | 60 |
| ggagtaagta | ctantctgan | ntntgccgca | tgcntntgnc | taccacacatg | gccatcnngg | 120 |
| tctcnatgct | gctntccagg | acanacgcnn | anaggnagng | agcttttgaa | tcacccctt | 180 |
| ctgtggggga | aaactacntt | caccaggant | accatggctt | tnccagtncc | agtanaatgg | 240 |
| tggaattgg | cg | | | | | 252 |

<210> 7
 <211> 318
 <212> DNA
 <213> Mus musculus

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| <400> 7 | | | | | | |
| gctggcgctc | aggTcatcaa | tgcttgTgaa | gagttctatt | gcctagaaca | tggaatctag | 60 |
| cctgagggcc | agatcaaaga | agaatatcat | caaggaagga | tatgactctt | cttcaatgag | 120 |
| ataggtacta | acagTccagt | acaatagcaa | acaccaacca | tgaatcagta | gcagtggcaa | 180 |
| gatccagcag | aaacagcaag | actccatcga | atcggcacaa | gtcaacggaa | gacgccagaa | 240 |
| tcagctggaa | tatcataagt | tctctggcac | atttctctct | gtgaagtga | gaccaataaa | 300 |
| aagatcagtg | aagaccgg | | | | | 318 |

<210> 8

```

<211> 411
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(411)
<223> n = A,T,C or G

<400> 8
agctgattta tccagagccc agcatgggtt tcctgactgc cgtgactcaa ggccctggtgc      60
ggggagctga caggatgagc aagtggacaa gcaagcgggg accacgcacc ttcactaaga      120
gtcgggggtgc caagaaaaca ggcatctata cttctgatag gaagtttgtg caaataaaaag      180
aaatggttcc agaatttgtc gtcccggact tgacggggtt caagctcaag ccctacgtta      240
attaccgagc tcctgcaggc atagacacac ctctgaccgc caaagcgctc ttccaggaaa      300
cagttgcacc cgctatcgaa aaagacttta aagaaggggac atttgatgct aacaacctgg      360
agaaatccgg tttnaancca cacaggaagg caagctggtc caatatatcc t              411

<210> 9
<211> 579
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(579)
<223> n = A,T,C or G

<400> 9
gactgcattt acccacatgg cagccctggt cccaccaccg cctggtccca gatttgtcct      60
ccgaggcaca cagtcgggtg tgaacacgct ccatttctgc ccaccatccc aagctgcagg      120
gaaccactt ctcttctcag ggtctcagaa tggcctagta catatctgga gcctacaaac      180
aagaagaata gttaccactc taaatggcca tggggggccag ggtgtaatct ggctgaagac      240
actgccacag ggacaccagc tcctcaggca gggtcganac ctgcggctgt gcctgnngga      300
cctggaggan ggcaggaaca ccatcatgga ctcanntnag ntggacagtg tgggcttatg      360
caggggctcc atcctgggtc ggggacagca gtgctggatg cttgctgtgc canggaaggg      420
cagcgacgaa gtgccacctg cgttaganat gaanggccaa gaagctgagt gacctncaaa      480
gaggaagact acttgntnca tggcttnagg ntggnatcat cnctgaancc tcagagnngc      540
atcttngtgt gtctgtggct tgggctgaac taataacca              579

<210> 10
<211> 236
<212> DNA
<213> Mus musculus

<400> 10
cctgagagca ggttggttgc ctggatgccc agaatatcgt aagctgttgc gtgtggagaa      60
gtcacacgct tagcgctgaa tgacaagggc cagggtgatg cttgggggtct cgactctgac      120
ggacagcttg gcctacaggg atcagaggaa tgtatcagag taccaggtga acaaagggtg      180
ccgcacagag gtccttaagc ttctataata aatttatcta tctaaatcaa aaaaaa      236

<210> 11
<211> 375
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(375)
<223> n = A,T,C or G

<400> 11
aactgagatg cctgccttcg atgtcaagct gaaaacaaaag caagaggact gtgttgtggt      60

```

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| ctggggagag | tgtaaccatt | ccttccacaa | ctgctgcatg | tccctgtggg | tgaaacagaa | 120 |
| caatcgctgc | cctctgtgcc | agcaggactg | ggtagtccaa | agaatcgga | aatgagaggt | 180 |
| ggcccaggcg | ctcctgggtg | ggttgctgac | cctggacaaa | gactaaacac | tgcaggggat | 240 |
| tcatacctga | gagagagagg | atgctgtgcg | cctttgagac | tcaccaaagg | cttgctttat | 300 |
| taatttgtct | gtttagtttt | gggaaattct | ctacaattaa | aataatttgn | taaaaatggc | 360 |
| ctttcctacc | ttggg | | | | | 375 |

<210> 12
 <211> 404
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(404)
 <223> n = A,T,C or G

| | | | | | | |
|------------|------------|-------------|------------|------------|------------|-----|
| <400> 12 | | | | | | |
| actgagaaag | gcccgtgaga | gctgaactct | gannactgaa | gttctaagaa | gccggaccga | 60 |
| tgtgcacaga | gaaggaatga | aggaagtatg | gatgtgaagg | aacgcangcc | ttactgctcc | 120 |
| ttgaccaaga | gcagacggga | aaaggaaaag | cgctatacaa | actcgccgcg | ggacaatgag | 180 |
| gagtgtaggg | tccccacgca | gaagtccctat | agttccagng | aaaccttgaa | agctttcgat | 240 |
| catgattctt | cacgngtgct | ttatggaaac | agagtaaagg | atttggtcca | cagagaagcc | 300 |
| gacgagtata | ctanacaagg | acngaatttt | accctaaggc | agttaggagt | gtgtgaatcc | 360 |
| gcaactcnaa | gaggagtggc | nttctgtgcg | gaaatggggc | ttcc | | 404 |

<210> 13
 <211> 314
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(314)
 <223> n = A,T,C or G

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| <400> 13 | | | | | | |
| ctgaacgagt | gacttcacta | ggcaaggact | ggcatcgctc | ctgcctgaag | tgtgagaaat | 60 |
| gtggaaagac | actgacctct | gggggtcatg | ctgagcatga | aggcaagccc | tactgcaatc | 120 |
| atccctgcta | ctccgccatg | tttgggcccc | aaggtcttgg | gcgaggtgga | gctganagcc | 180 |
| acactttcaa | gtagaccgag | gttgtggaaa | ctctccctgc | ccgcccaggc | acatgccagg | 240 |
| ccttaccctt | ggacagcagg | gtctcgggga | accctcagtg | cctttaataa | acctgatctt | 300 |
| tggaaaaaaa | aaaa | | | | | 314 |

<210> 14
 <211> 336
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(336)
 <223> n = A,T,C or G

| | | | | | | |
|------------|------------|-------------|------------|------------|-------------|-----|
| <400> 14 | | | | | | |
| gactgaggag | ggcccgtgta | gccattacga | gggggtgggc | aaccttctgn | tttgtatggt | 60 |
| atgccaaagg | agaccgtatg | cttcggaatg | ctcaaggcta | aggcccaggc | cctgggtgcag | 120 |
| tacctggagg | aaccctcac | ccaagtagca | gcatacatac | agcgtgagat | gccaggactt | 180 |
| ggaaggtgcc | attncnagg | tggncaacct | tntgntatnt | ntgtatgcca | nggagaccgt | 240 |
| aagcttctaa | tgtctctngc | taacgccccat | gccctggtgc | antacctgga | ggaacccctc | 300 |
| acccaagtag | cancatcata | acagcgtgag | atgcca | | | 336 |

<210> 15

```

<211> 280
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(280)
<223> n = A,T,C or G

<400> 15
caccctctgg ccttgacaac cctgtcctgg ntctnacctn gcaatgntnn ngccctaaga      60
cgccttcacc tatgggccct ctttgggncc ggacgggacn tggactaacc tggcccnnggt      120
gttcttncct ttttgaagan cttaaancct agganccctt ngctctgtcac accaggcctg      180
gggctggggg acagaaccgg agcacacacc ccctacanct gtcangnggg ggatggaacc      240
tggggacctt tccttttcca taccatgggg ccaggatatg                               280

<210> 16
<211> 329
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(329)
<223> n = A,T,C or G

<400> 16
actgagatgt ttcaaaccctt ggttcaaaaa gtctgggtcc ccatgaaacc ctncctataacc      60
caggtttacc aggaannntg ggnaggagtg gggttaatga gcctcatcgt atataaaaatc      120
angagngctg ataaaagaag tnaagctttg aaaggtcctg caccctgccc atggccatca      180
ctaactgctc cgaatccaca agatgaagac gtcggctaaa cttgagcaag ctttggttaga      240
tgggaacatg gaacatcact gtacacttat ctaagtacca tttataatgg tggcattaat      300
aaatgtatct gtgaatacca aaaaaaaaaa                               329

<210> 17
<211> 374
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(374)
<223> n = A,T,C or G

<400> 17
gactgaggga tccggcactg ggacgcagct tctaaaagtc caggagctct ttcgagccaa      60
ctcaacaaac taggaatcac agatcttaca agctgagttc tggctgctcc agttggaagc      120
ccacatgcca aactgctctg gagtcgccgg aggcacagc agatcccagc cgagccttga      180
gagaggactg tgatctgcct tacgggtcac ctactcagg actcagcgct cgcacgttgc      240
agcagctcca gacccactg ntaccggaaa gttacaggta ccggaaccga gaagaccaag      300
cgcgggccag gaaccgcgga ggaaaacttc ccaggatggn ctcccactca aagctgagga      360
agctcttctg ttca                               374

<210> 18
<211> 396
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(396)
<223> n = A,T,C or G

```

<400> 18
gcatccgga gcatctgaaa aaggaactgg atgagttagt cggtgccatt gaagaacatt 60
ttttccagcc acaaaaatat aacctacagc caaaagcaga ataaaacatt ccagtactgg 120
ataggattaa atttacctcc aataaactga acttgattgt taaagcaata atatttttagg 180
gccaaagtgt tcagataatc accacaagta ttacatatt ttcaacagct ctatcttcct 240
tgtgattttt tttttaatta ttattatttt tagcctgaaa agngaataaa aaagcttggc 300
caaaccacaac aaactaacat ctntatgaaa atgttaaatac tgggcattat ntgnantttt 360
tnaattaagn atttaatttt ctaaaaagta aatggg 396

<210> 19
<211> 115
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(115)
<223> n = A,T,C or G

<400> 19
cgatccccag tcttttagtcc ccactctgct ttgggatagt atgancttcg tttnggacnc 60
gngtgcactt tgtccantta caaaccacaat aaacaataga gtggaaaaaa aaaaa 115

<210> 20
<211> 427
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(427)
<223> n = A,T,C or G

<400> 20
agggccacaa ggggaagaca tgccatctgc caagcagcta gccgatatcg gctacaagac 60
cttctctgcc tcgatgatgc tcctcactgt gtatgggggt tacctctgca gtgtacgagc 120
ctaccgttac ctccagctgc gcagtgccag gcgccaggct gcagaagagc agaagacctc 180
aggagtcctg tagagcagcg aggcgtgagg cctgcggcct gaaatggaaa agattttcct 240
gcatgtcaac cctggcaaga actaggcccc catgcctttc aaacctgctg ggctaaaatg 300
ccttggtttc tgtagtgcta ctagcttgag ccgttncatga cagtttatgg aggccatcaa 360
gtaaatggga atgtgagggt gaggtttatt acagagatta aatattttgc tttgttaaaa 420
aaaaaaa 427

<210> 21
<211> 362
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(362)
<223> n = A,T,C or G

<400> 21
tgagctttga cagaggaact ggaatccgta gccagtgagc ttcatgccat tgacatccag 60
attcaggaac tcacagagag gcgggcaaga gtcctctcag agaaagtcag tcctgacagg 120
gaaaatcaaa cagtacttgg aggactcttc ggctgaggcg agcagcgact tggacacatc 180
accagctgct tggaataaaag aaggtttgcc actctcctgc cttgccatng ncgtaatcaa 240
gaatgaaatc actctgtgga tcagtgtgta ccgggagata aagctggcat ggggaacttg 300
caggcagata ttctttattc atgtgctata atattttaca tgtaaacttg gaaaaaaaaa 360
aa 362

<210> 22

<211> 330
 <212> DNA
 <213> Mus musculus

<400> 22
 tgttcgaagc cctaagaaga caaagggttta tgaagaatac agcttatgtc tctacataat 60
 attgaccctc tgaattcattc agaagatatt ctgaagcctg aaacataaga taaaaaccag 120
 tggccggttg ttctactagt caacaaagac tagtatcttt ccgttctaag ttcattcattg 180
 aatgagattg ttcttctgat tagagtagaa aactgaagggt tcatgattat ctaggtaaga 240
 tacacacaag aattttggcc cacataaaca aatgatttga gctaaagagt ttgaaagtat 300
 aaatttagat ttctgcatga ataaaaaaaa 330

<210> 23
 <211> 535
 <212> DNA
 <213> Mus musculus

<400> 23
 actgagctgc tgccggtgtg atgagctgag actttaagag aatctggcgg ccgcctgggc 60
 tgcggccctg agagtcagggt ggctgcaaag gacaaccgcg ggtgtggtgc cacaggaggc 120
 accgagagcc ttccacatga ccaaggccat gttgccagggt acatataccta ggaccccaga 180
 agaacggggc gcagccacca agaagtgtaa tatgcgtgtg gaagactccg agccattccc 240
 agatgatggc atcgggtaat ggtgactacc cgatgcttcc ccaaccgatc gcagcatgag 300
 agggatccgt ggtatgatgg gaccaccag acctcagggt gacctagggt gaaccgatac 360
 actgggacct agacatttac gtcaggatca ggagtcgtgt ggacacgtcg cctacacctg 420
 cttcctgaga tgatgtcatg tgtaaacact gcttcggctt cgtaggctttc atggttttca 480
 tgttctgggt aagggacatg ttcccttctt aaagcagtac ccttacaata atccg 535

<210> 24
 <211> 244
 <212> DNA
 <213> Mus musculus

<400> 24
 gcttcgttac gacgatgagg taaagcgggt acgtggctga accagtggag ctggcacaag 60
 aattccgcaa gtttgacctg aacagcccct gggaggcttt ccctgcctat cgccagcctc 120
 ctgagagtct caagctcgaa gctggagaca agaagcctga aaccaagtaa cttcaaaaagc 180
 atgtagatcc tagaggaaaa ggcctcacct aagggtgtct gtaaataaac tccaatggac 240
 attc 244

<210> 25
 <211> 439
 <212> DNA
 <213> Mus musculus

<400> 25
 gagcaccat gttctccaga ctgttggaag acaggcagcc ccaccaccag ctcacacatt 60
 ctgtgcacaa gtgttccct gactgtcttc gctgagcaat gaaactgcaa tgacgctcta 120
 cacttgacc tgaactctgt gtgccttttt gtccaagcac agggctctgt ttacaccagc 180
 atattcttac ctatgtggag gcacaggat gccaatgctg ctgggtcttat gttgaaacat 240
 gtaaaggtag tggtttggtt ttcatcttca tttaggaaaa tgtgatctaa agtcagctaa 300
 tagatccaaa cagcacaat ggacttttct tttcaagatg gacttggatg gtattgtaaa 360
 tatcatagtc atatgatcag ctccagctga catctgagtg accttctaaa gtcagcctgc 420
 aggattttcc aagcatgct 439

<210> 26
 <211> 107
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(107)

<223> n = A,T,C or G

<400> 26

tgggctccat cgccancact gtningaaaca aaaaccaaac cccgaaatgc tnacttattc 60
atcaagggga gtttgaccaa tgctttgggg gccttcaaaa aaaaaaa 107

<210> 27

<211> 256

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(256)

<223> n = A,T,C or G

<400> 27

gctttagcaa aacaatcaac aatccagtaa gttgctgtat gattggaggc atatgcaggt 60
atctgtgcaa gggcaacatt cttcagaatg gcaattgtgg agttactagt ctcaactgct 120
gcaagagaaa atagagaaga agtcaaagat ncagtgaacc naagaaaaca atttgcacct 180
ccatgaagat gaaccaaaca taaactaaat taaagttcct tgattaaatg caaacgcatg 240
ttggtaaaaa aaaaaa 256

<210> 28

<211> 135

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(135)

<223> n = A,T,C or G

<400> 28

cagaatggct gatacctgca aaatgaaata ctnagtgtng gacagccctt tngggaanat 60
ggagctgtct ggctgtgagc gaggnctgca tgggatacgg ntgctcactg ggaanacccc 120
aaacactgac tccgc 135

<210> 29

<211> 186

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(186)

<223> n = A,T,C or G

<400> 29

acgtcagttc acaatgccag ncctggaant gagttactgc anaggaaaaa accacacata 60
gcctatgaga gcagtgaggg ggtggagaga anagggtggat gtccccctta cttcnaacat 120
gcttttgaca cacaccaact tnngngnttn gatctggtgc aaattaaaag accaatgtga 180
gatatg 186

<210> 30

<211> 335

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(335)

<223> n = A,T,C or G

<400> 30
gacatagtct gtggtgagtt ggaagaaggt gaactggaag acgacggggc tgaggaggtc 60
caggaccccc ctggaggaca agagaggagt cggaaggaga agggggagaa gcaccacagc 120
gactctgagg aggagaagtc tcaccggagg ctgaancgga agcgggaagaa ggagcggggag 180
aaggaaaaga ggcgctcgaa aaaaaggcgg aaatctaagc ncaaacgcnn tgcttctctc 240
agcgatgact tctcngact tctcanatga ctcanatttc anccccagtg agaanagtcc 300
cgcaagtacc gggactntag tccccatac gcacc 335

<210> 31
<211> 144
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(144)
<223> n = A,T,C or G

<400> 31
tcttgaagcc cagaacatga tnaaggggtt ttcgggctcc ttgaatataa ctctacaatc 60
gagcttcatg gtgcaaggca cgagtgatcg ggtntcgtcc anaagggtga acctaataa 120
gtaaatnccc ttgtgcccat tacg 144

<210> 32
<211> 138
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(138)
<223> n = A,T,C or G

<400> 32
ttaaattgaga gactcacnga nctgcacttt ccgcaaaagn ccnaatgng ggccccgtac 60
cctctgtacc cagcgganat agngcctgc tcttntctct cctgccgctt tcacctaccc 120
ngcttcaactg gatgccca 138

<210> 33
<211> 480
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(480)
<223> n = A,T,C or G

<400> 33
gactgagctt agggcngtct aagaataatg ctatnataaa cagccgacct tantgcaaag 60
atattggcgt ttccaagaca acaagataca agatatatgc tttggagncc taggagaatc 120
ttggattcaa agacctgtan nggncaggta ctacagtga ggtcaagagn ttgcagcaag 180
angactcatt natagaagga gtgancgacc aangccttgt ggctgtggtg ntcagcttgn 240
cgntgaccgn tactntctct tatgcacttn tcagaaatgt ncnnctgaa catncatcca 300
taaaaccang agctaggcng agtgcttcna gaacaatncc naacagaaca ggatgtgnct 360
gtccttgccc gacagcagta tctacactga aatgnnctgt ccaatctgct tacatcaagc 420
ctcctttctt ngttgaaaca aactgtggac atctcttttg tgggtctgct aattgcatac 480

<210> 34
<211> 219
<212> DNA
<213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(219)
 <223> n = A,T,C or G

<400> 34
 tcactaccgc gtgttccaca ccattagtca nngagggctc actctaggac acaagctanc 60
 ctaggactgc tngaggnccc tncagcaaga cgannnggtgc ttngnganaat tttntcccca 120
 tgtgngntg aatangctgg aannncactt ttatcaccat ctgacccatt aggaccttgn 180
 naacatagaa ttaaaagcga ntaatctgga aatctcaca 219

<210> 35
 <211> 152
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(152)
 <223> n = A,T,C or G

<400> 35
 cttatatatt gatgccaaaa taggancatg gtgnngcnga cnnnaaggg canctctgga 60
 ggcaaccctt atgccaatgcg ttggaaacan caccgngcc tctggnaaga anccgggnag 120
 aggaaccatg gangaggatc ctatggatgt ct 152

<210> 36
 <211> 201
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(201)
 <223> n = A,T,C or G

<400> 36
 actgagggaa ctgcagcaac aaggaatgcc tggtcctgca cttgaagcca gttctcaagc 60
 tccaggactg cccgtggtat aaccaaggg tctgcaagga aggtccccctg tgtaaatacc 120
 gccatgttca tcaagtactg tgtnccaact acttcaccgg cttctgcccc gagggacctc 180
 agtgccaatt tgggcaccat a 201

<210> 37
 <211> 219
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(219)
 <223> n = A,T,C or G

<400> 37
 gggggcggaag agcgaaaacc actccaggnt ntnnctttgc tttgcgttcn ctggatccac 60
 cccacgcct ggtaaggnc aagcaaccat ggcaggact agagggagag taaggctata 120
 gaagccaatg gagggagggg actcatggaa agntggccca aaccaacct gacccacac 180
 tggcacctg ctagcccaat aataaacatt ttgctgac 219

<210> 38
 <211> 289
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(289)
 <223> n = A,T,C or G

<400> 38
 gaggactttg gaaatcctaa atggccnagc tactgcaatc tccacccagg ttccttcctg 60
 aggagtggta tattgctaac aaaagccagt accanagagc aagaggncctc ataaggtccc 120
 tgnnnctaga acgcttggtt ggcannagag ccagaaggct tngtngngaa gaaattgaga 180
 agaccaccag gaagtctnag tagcgacgtg aacaangaaa ctttgngnca gagactntga 240
 gngagggcca agngttctcg ggaagnaagc nnttacaatg acaaaactt 289

<210> 39
 <211> 138
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(138)
 <223> n = A,T,C or G

<400> 39
 gccataatta cttcttgttg aactctcnga ggtcggacng gagangtgac atggntcctt 60
 anattnacat gtgcttacgg agaaacnggn ggtgcgtctg aanagcccag aacacagtct 120
 cggagagtct ggcccccg 138

<210> 40
 <211> 129
 <212> DNA
 <213> Mus musculus

<400> 40
 taagcctggg tggcaacctt caggtggcac tggaaactac ctggttcctg gacatgcccc 60
 gtagaaggcg gggctcccag cggcagcagc taaggtaagg gatattaaat gtatccataa 120
 acaaaaaaaa 129

<210> 41
 <211> 223
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(223)
 <223> n = A,T,C or G

<400> 41
 actgaggtaa cattcaggaa tcctgggntg atgatacatc agccttcggt tctctcagcc 60
 agccagaaca agtacaaatt ggtagtgctc ctagacatat gttttgtttg ttaatgaggt 120
 gggggtggtc acctttatga cagctgtggt ttcaggcagc tagctggctc acttagcatt 180
 tctgcttggt ttatTTTTAG cttgctagtt aaataaagaa aaa 223

<210> 42
 <211> 482
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(482)
 <223> n = A,T,C or G

<400> 42
gactgaggggt tttgcggcct ccaggtggtg ggtccaattht ttcattaggg tttgatgagc 60
cagcagaaca gcctgtgagg aagaacaaga tggctttctaa catctttggg acaccggaag 120
agaaccccc atcttggggc aagtcagcag gttccaagtc tagtggtggc agggaaagatt 180
cggagtcgcc tggaaacacag agaagtaact cttctgaagc aagctctgga gatttcttag 240
acctcaaggg agaaggatgat atgcatgaaa atgtggacac agacttccaa gccaacctgg 300
cgcagatgga ggagaagcca gtgcccgtg ctcctgtgcc cagcccagtg gcttcagccc 360
cagtgccatn caggagaaac cccctggcg gcaagtcag cctgggtcttg ggtagcttc 420
ttgngttgga actctgncc tttgnetgnc tggttggtgg cccatgcttg ggaactgcac 480
ag 482

<210> 43
<211> 379
<212> DNA
<213> Mus musculus

<400> 43
ctgagttaca ggatgttaga tccggtacag aagagaatga ggaaaagcta cttatcagag 60
gaaagatcac cgatcactgg acaaatcgta accaggctct ggacctgcaa cattccaacc 120
tctccacaca gcgcgggtggc tctgattggc cttcaacct ttacaaacac agctgctttc 180
taggaatgcc ctcccacact agcaattcca tcgccctacg agctaagatc tggcatcttc 240
gagtgccatg caagcagaga ttcaaagtca atgtctcaaa actaaatcac tttttcttta 300
tcttgagaca cacattcttt ttcttttgtt tgacaataaa ttaggatgct ttgttttttg 360
gctttttcaa aaaaaaaaa 379

<210> 44
<211> 487
<212> DNA
<213> Mus musculus

<400> 44
gactgagcat gaccctgcct ctctttaccc gccatgatgg atcagccagc tcagtaagcc 60
tgctcacacc tctttgtcct gacctggaag gaaagaaaga ctcgatgagc atgaggatca 120
gcacaccgtc tgccctcagct cctcccgcct cccgctgtgt ttctccatct ctgaggcatg 180
gcattgtccc atccatcccc actgcgggaa tgaaccacg tgcagcagct cttcaccccg 240
gggagtcgca atcgccacg tctttctagc tgtttaaaag tcaactagcc acaatctgga 300
gtcgccctggg aagagagccc caactgacat tgcctaggtc aggtctgtct atgggtgtgt 360
ctgtgagggg ctgactgttg atccatattg gaagaccag accaccattc cctgggcagg 420
tgaccctgga ctatgtaagt gaagaaaact tgctgaacat aggtggtgtaag caagcagtg 480
ctccaca 487

<210> 45
<211> 458
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(458)
<223> n = A,T,C or G

<400> 45
ccgtaccgga agcatgaagc cagaggngcc atgcagaggn ccctgctgaa gctccaagct 60
cactgagctg ttagagcgcc tgcanagaga cagggangat ntgggttttt ttggaaacct 120
tatntttcca ctctttttag cagngatcan gctgatacct tgnccagatct tctgcctgcn 180
caagtgtctg cagccgtgtg actgnntgta cncaaactag gacctgncca gacgncagtg 240
angatnagtn nnntgnactt gctgccttng cctgancaan gctatnacac tgaggctgg 300
cactctgaag gccttcaagc tgagccgcat tcaactggga gcagcttcta cgggtgtaang 360
ataggatnat gtctccacg cacgggttca ttgcaggnga agcacttggg gcaggnggcg 420
aaatccacta tactggtnga caaatgtgat ctaactac 458

<210> 46
<211> 174

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<212> DNA
<213> Mus musculus

<400> 46
gagcagcacc tggaatgcat agagaaccag gttccctttg gaaaatattc actcgtttcc      60
accagcccaa acccgaaggt accatcagta cgtgaggcct acaacagggt tctctgtttt      120
cctgtagcca gcctctctga tgctoccaa aatgtatttg aaaagcacct tgat              174

<210> 47
<211> 196
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(196)
<223> n = A,T,C or G

<400> 47
gactgagaaa aattttaagt gcctccttat gccaaaggaag ggccagggtt tggaatgactt      60
caactaacag tagagattgc tgtcctaggg actaagnnta cacacatgaa taaangacgg      120
aaattccagt taaaaggnaa aggagnncgt ggggcctant cncnnggtc angncncaag      180
gactaagtat cgacgc              196

<210> 48
<211> 548
<212> DNA
<213> Mus musculus

<400> 48
gactgaggta ttgtccaggg ctttctcaca gctcctaaag acggacctca gacgtgcac      60
acgtggacct ctgaaaaaac catggagctc attgctccaa agccaactgg agagcttctc      120
ccaatcctgc tgctgctgct gttacagctg cttacaacag ccattgtcgt ggctagagtc      180
ttatatccac tgtgacacca taggagaaat gattccactt ttgctgtctt acatgacct      240
ataaaaggag gcacatccca ttatactctc aaaccctgtc tgcactcagg gagaggttat      300
aacctcatta aggatctttg gagccatttt ttaggtcttg gcaaccatgg ttcttgaatg      360
ggtaactgct ggcagaacat gaaatccttc ctaaactgat tgtccacttt tttctttgac      420
attctcttga gaacagccac tagtttctca gtgtgcttag caaatatgaa tttacaatat      480
aatcaatat ggacattcat gtttcacaga cttcaaaatt acatctatga gcataattttg      540
gcacatag              548

<210> 49
<211> 208
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(208)
<223> n = A,T,C or G

<400> 49
tcagctggca tcaatcagga tcccatccct gagaggactg catcaactct tttggaaact      60
gtcttccac cttgatgcc tgcgctgtgc agcttctgaa aatgacanac agggaaacgg      120
caccctggcc atgganantg naangctngg ataactagan gattttcttg gaacagatan      180
gncctttccc tagtgccata gaaaacaa              208

<210> 50
<211> 104
<212> DNA
<213> Mus musculus

<400> 50

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| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| gcacacgcca | ttcacgctgc | tcaagggcag | gtcggcacca | gtatcagggg | cttcggcacc | 60 |
| tgcaggaatg | tcaaattaaa | catctgttaa | tagtaaaaaa | aaaa | | 104 |

<210> 51
 <211> 239
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(239)
 <223> n = A,T,C or G

| | | | | | | |
|-------------|------------|------------|------------|------------|------------|-----|
| <400> 51 | | | | | | |
| ctagacgatac | actctnncna | gagtgactct | cgncgaaaac | ngacagaaat | ggctncngga | 60 |
| tgagatggac | tctgactggc | gaancacctt | tgagcttgtn | acctagcagc | tggggccagt | 120 |
| gagaggnagc | tnaaacnctc | ntgcctcagg | ntcttanaac | agnagtggcn | attgangctn | 180 |
| acanaataac | atgcctnttg | ggcaaggatg | atnggnctcc | tggtaatgt | tcaatctag | 239 |

<210> 52
 <211> 539
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(539)
 <223> n = A,T,C or G

| | | | | | | |
|------------|------------|-------------|-------------|------------|-------------|-----|
| <400> 52 | | | | | | |
| tgaggtagaa | gccctcattc | ttcatctacc | cttttttcag | tatctggcac | caattctggc | 60 |
| cccatcattt | gtggcccatg | gctcttggtg | tatgccgaag | atttacaggc | agtttctgtg | 120 |
| gaacatttcc | ctgtccacct | ctaataaagc | cccgtcaaac | aagaacatgt | gattttgctc | 180 |
| tgactgcaa | gaagatcagc | acagactcca | gaatgtcagc | cgctctcaag | ctattagaac | 240 |
| ctttaaagta | caaagcacct | tgtaatcctg | cttaccgtgc | agcccaaagc | gtggcccat | 300 |
| ggcacatggg | aaacatcacg | ccacacgggg | gacagacgct | ccctgaatgt | aataagctcct | 360 |
| gccatcttgc | cagaaaagtg | aagaacgttg | gtgggtaccac | ccttcctcgg | agaaccttca | 420 |
| cagccagcag | tgcccacctg | ggtttgaggt | tcaacaaagc | ttctaccctt | aatgccagca | 480 |
| cactgcatnc | agactcatcc | agtgtctggag | gaggtgaaga | ggatgtagag | ggctttgat | 539 |

<210> 53
 <211> 181
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(181)
 <223> n = A,T,C or G

| | | | | | | |
|------------|------------|------------|-------------|------------|-------------|-----|
| <400> 53 | | | | | | |
| actgaggtct | ttggatgcag | cccagggncg | caccaaataca | tgaagatctg | ccttaatatca | 60 |
| ctgcgtcagt | gctcggacta | aaagactgtg | ccaacacacn | annctatcat | gaaacttttt | 120 |
| ttgtcngng | acaggatctn | gatagaacag | gctggccctc | aactgggttg | gctagtagag | 180 |
| g | | | | | | 181 |

<210> 54
 <211> 203
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature

<222> (1)...(203)
 <223> n = A,T,C or G

<400> 54
 cctatgtgag aagctcngag ggtgangcac cgtttcgaac tctgcagtgt gcaatgaaga 60
 cgaggaagtt ccagcatggc ctcgggggat gttggctaag ggacagagcc cgaaagagtc 120
 cttcacagag accacatatt tatctccctg gatgccttat aggccttaat aaaaaaatat 180
 caaaatagtc tataaaaaaa aaa 203

<210> 55
 <211> 238
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(238)
 <223> n = A,T,C or G

<400> 55
 tgccctccatc acttgcaaag aaattgttcc catgggtgnta cttgncattc tatttcccaa 60
 ttactctacc gccctcctac ttggcatgtg nttgccagn tcacaggaga tggactattt 120
 attaaaantc ctgaatcaga gaaataggga tctcaccagc ttgntgccag gaggaaggga 180
 ancatgtctc accanaacac agctacatcg cctaantcag gatgaaaact ttatttta 238

<210> 56
 <211> 133
 <212> DNA
 <213> Mus musculus

<400> 56
 ggaggctgat ttttctttgc actggacacc accctgttag ttcctttggg caatggggaa 60
 gtccctgtctg cgggctggat cttctaaaag caaaagtatt aaatgtttaa gagttttcct 120
 ttaaaaaaaaa aaa 133

<210> 57
 <211> 292
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(292)
 <223> n = A,T,C or G

<400> 57
 ggccatggct gggcttgnac ttcctcctgc agtccgggan gatcctcttn cctcagccct 60
 caaggnagct gngacgatag gccngaccta ccatgccagc ctgattcccg tgaaactttg 120
 ngaaccaaan acttntgctc tnataangag cttaacantt cttntctgtnc aaancttggg 180
 ctanaaatgg ngtngtggtt gangactatg ncaaagaatc tcaggcccna ggatgtcatc 240
 gaggaatact tcaagtgcaa gaaataaata aatttttggt gaaaaaaaaa aa 292

<210> 58
 <211> 496
 <212> DNA
 <213> Mus musculus

<400> 58
 ctgagcccca cccagacaa ctccctcatg ggcttcgtgt ccgaggagct caatgagacc 60
 gagaagcagc tcatcaaaga tggcaaggcc agcaacatgg cgggtggtgta cggcaaggag 120
 gcgagtatct ggaaggtgag cccagcaag cccactgcca accacaccgg ctccaatgcg 180
 ggccataccc acaacacttg ctgagtgtgt gtcacaccca cgccagtacc agacacattc 240
 actgtacctt ctgtgccttc acaaggacag gccacagccc cttctgacac aagccgtgtc 300

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| caccgcactg | ccaccaccac | ccaagcatag | gccacagcca | cacagatcat | ctgcatgcca | 360 |
| gcgctggaca | cgcctaccgc | acctggttct | ggtgctgac | acccccataa | ccaggaaggc | 420 |
| tccagccaca | caatgacagg | gcttacctag | ccaaggccat | gcctctgcag | tccatgcctg | 480 |
| aagctgcagg | cacagg | | | | | 496 |

<210> 59
 <211> 172
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(172)
 <223> n = A,T,C or G

| | | | | | | |
|------------|------------|------------|------------|-------------|------------|-----|
| <400> 59 | | | | | | |
| gactgaggtg | ggtttggnc | gagtatacct | gngcaggagc | cataattact | tcttgtggaa | 60 |
| ctctcaaang | ccaggacagg | nggcctgggc | ttggctccat | ancncnatgg | cactnnaagg | 120 |
| tcacnacttt | ggctcgngaa | ttcccnagtg | atggggaata | tattttaaaaa | aa | 172 |

<210> 60
 <211> 162
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(162)
 <223> n = A,T,C or G

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| <400> 60 | | | | | | |
| gactgagtc | cagaaatcct | ggntagggag | gcactttgac | caaggaggga | gtgtgtatat | 60 |
| attataccaa | gctccaaaga | ccctcacaga | tgtcttccag | gatgtcagat | ttgtcagcaa | 120 |
| cttgtcagat | gtttctgtgg | tcgtttggtc | aagaaaaaaa | aa | | 162 |

<210> 61
 <211> 163
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(163)
 <223> n = A,T,C or G

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| <400> 61 | | | | | | |
| gcaccaaact | tgagacgagg | gattgttctt | ggcctctagc | cctcctcaca | cccagtttta | 60 |
| tttattgggt | tggctcttgc | tctgagaggt | ctaattctct | ctcaattctt | cctaaactgg | 120 |
| gctgcatgct | gnctgagcac | aggaaagata | gcaggaatgg | aag | | 163 |

<210> 62
 <211> 189
 <212> DNA
 <213> Mus musculus

| | | | | | | |
|------------|------------|------------|-------------|------------|------------|-----|
| <400> 62 | | | | | | |
| tgaggacccc | cacggcacga | gtattctgtg | gccaggggcca | ccgcctcacc | ctcctctgca | 60 |
| gtctctgtca | cataggcatc | catggagggg | ctgtccaagg | cttctacata | actccagaat | 120 |
| tggaagatgg | tgaactgctc | ccccgggcct | ggttggggcc | tcctgggcag | cttctgtaag | 180 |
| aaaaaaaa | | | | | | 189 |

<210> 63
 <211> 124


```

<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(124)
<223> n = A,T,C or G

<400> 63
agtttgacaa ccaaaatgag nacagacttt accnatatac atcgaggatg aagagacttg      60
ctcccagtag agaaccactg gtcttgntct ttaagagtct gttctgactt tcctaggacc      120
actt                                     124

<210> 64
<211> 229
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(229)
<223> n = A,T,C or G

<400> 64
tgagggtgggg tctttcaagt gcaaggcctg gtgtgtacaa caggatctct tagaaagaag      60
cacagctggtt ttcttgcagt ngcgggccccg gaaccacacg accggcagct ccagccccag      120
accacagctc gctggatttt cagaagttcc ttggggccaga agtgccagcc agatcactct      180
ttctctcagg tcacatatgg tacataaatc actttgcaaa agaaaaaaaaa      229

<210> 65
<211> 190
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(190)
<223> n = A,T,C or G

<400> 65
ataagcagat cctgggtgatg tgtgntcatt actgagagat tcctctccca cccacacaaa      60
ctgtatntac aggggtgggga cctgctggnc acaggcatgc caatactgtc tgaagactng      120
tatttgcatg anaccnttga cactgatcac ctctcanctc aggcctgact ccaaccacag      180
ggaggagatg                                     190

<210> 66
<211> 331
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(331)
<223> n = A,T,C or G

<400> 66
gactgagact tggagcaaga cttctttaca gcccacact gaggttccca ggtacgagnc      60
acaaggaagc catgtgattn ctgngtcgcc cagaggctct gcagcccctg cccctcctct      120
ccaccgagct cccttcacag gattgcacct ctgccagcca ggaggctgga gtgtagatgc      180
tctatgaggt ggctgtgcc aagagccac gccaaaggcca tcttgagac tgaaaggagn      240
nngnttgcc cacactctat ccctgcccac gcacctttgg ccatgaactc cgtgacaata      300
aagatgggct cctgagagac caaaaaaaaaa a                                     331

```

<210> 67
 <211> 239
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(239)
 <223> n = A,T,C or G

<400> 67
 gttccataat gggagtgggtg agcngggccc ccctactgtc accccgagga gcagtataca 60
 ctcggggcaa cggccctgcg gtccgtcatc atctttgctg gcttccagac agctccgatt 120
 cagacgtgga ggaagtgacc atggaagana nccccgtcat ctcccgacct ccccagacga 180
 atctggcaaa cctacgcagg ggctgggttag cctccccagg acccgggatc agtcaagaa 239

<210> 68
 <211> 112
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(112)
 <223> n = A,T,C or G

<400> 68
 aactgagaga ccctgggaga aggtcaacaa caagaatgan ttgagtnntt gnnnaatacc 60
 cnncaggggnn gtgttacaca cttnaagggc gtgggtcttg tgcttctcac tg 112

<210> 69
 <211> 113
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(113)
 <223> n = A,T,C or G

<400> 69
 agttaataag ggggngctg gcggacaccc tcagcctgac ngtgcattga tcccgaacttt 60
 gtcagatgga cttttnaagac ctatttcaat gaaatggttg agaataaaaa aaa 113

<210> 70
 <211> 617
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(617)
 <223> n = A,T,C or G

<400> 70
 ctccctggac acctcaagga agatggttct tcatctagaa ggcccttccat caatagccag 60
 gtagcctgag ctacatgaca agatcccagc tcaagacaaa cagacctcat atctagtcac 120
 cataattatt gtttatttag acttgctccc tcctccctct gatttcccag gagcctgtgg 180
 gtatcctcag tctctgagaa aataacagcc agcatctggt acaggggctc tcggtgcttc 240
 tccagtgagg caggaacaga taaatgagaa aaggaaggaa tcagggtgaa ggcttccgct 300
 gccatcttgg atgaagaggg atccagaatc cagcctggag gtcattgtgat gctctcgaca 360
 tttccaaagt gcctcttgtt gcttctcacc acaaccaaga gatgcacaag gaaaggaagc 420
 ccataccctg tagtttgcaa gccccagtg tgccggggagg gacctgctca aggtcagaga 480

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| ggagcagaga | ggctggaaag | ccctgactcc | ctgggctaag | cctgggttca | ttctacttnc | 540 |
| ttcaccagct | tcgagtgcc | ctggaaacac | ctggcacgac | aatcgggaaa | taaaagaact | 600 |
| ncatggctta | aaaaaaa | | | | | 617 |

<210> 71
 <211> 182
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(182)
 <223> n = A,T,C or G

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| <400> 71 | | | | | | |
| gactgaggtg | ggtttgggct | gaggnaaacc | tggncagcag | ncataannac | ttcttgagga | 60 |
| actctcaaag | gncgnacnnn | aggcaggnan | ctactgctgc | tcacccttg | agagacttac | 120 |
| ccggtgcttg | cctgaactgc | aataaaggac | tcatattatt | gagcaggact | taaaaaaaaa | 180 |
| aa | | | | | | 182 |

<210> 72
 <211> 221
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(221)
 <223> n = A,T,C or G

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| <400> 72 | | | | | | |
| actgaggccc | aaggaagcct | ctcctctcct | gtttccagng | tgatcaatca | ccaatacaaa | 60 |
| ggagttcatg | tgacagctgg | gccacttita | atatgaagca | cttattgaat | tatanannaa | 120 |
| acatnccgtt | ctgnntgctc | agcgtccagg | acccccgagg | gaaggcacca | tctccacaga | 180 |
| aggnccaaca | tctttgtaga | agaaaagcca | actggggaca | g | | 221 |

<210> 73
 <211> 126
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(126)
 <223> n = A,T,C or G

| | | | | | | |
|------------|------------|------------|------------|-------------|------------|-----|
| <400> 73 | | | | | | |
| tggccttgaa | tttacagaga | tccacctgcc | tccttctcta | gagtgtctggg | attgaagcac | 60 |
| cactctgggt | aattacttct | ttgtaaataa | actngcacaa | acgtcaccac | cacacacaaa | 120 |
| aaaaaa | | | | | | 126 |

<210> 74
 <211> 190
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(190)
 <223> n = A,T,C or G

| | | | | | | |
|------------|------------|------------|------------|------------|------------|----|
| <400> 74 | | | | | | |
| ggtgagaaga | ggagtttgaa | gtgtttactc | tggactatga | actgtgttgn | actgggatct | 60 |

| | | | | | | |
|-------------|------------|------------|------------|-------------|------------|-----|
| aggattcaag | tgctaaatgc | acagtccatc | cttgctttct | ttggatatatt | tgctcaagna | 120 |
| tgatatgtgtt | gggtttgagn | acttatattg | tagagtatgt | caaataaata | ttgatttacc | 180 |
| aaaaaaaaaa | | | | | | 190 |

<210> 75
 <211> 192
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(192)
 <223> n = A,T,C or G

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| <400> 75 | | | | | | |
| agactgagtc | ctggtacctg | ntgtngccgn | gttgcccttc | ctccctnctt | ntcanngggg | 60 |
| gantcccagg | gngaccgnnc | cagcctgcat | ttttggtgga | aaattagatg | gagtgagaag | 120 |
| ccccctgcgg | actcccagct | ggatggaaaa | gacaggagga | gaaaaggaca | aagacaaaca | 180 |
| ggaaaaaaaa | aa | | | | | 192 |

<210> 76
 <211> 107
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(107)
 <223> n = A,T,C or G

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| <400> 76 | | | | | | |
| cccattatgg | gctccactat | gttggncgac | acctctgnct | cctgcaggag | atatcgggng | 60 |
| nggccngag | cctctgtcnt | taaactacct | catgctttta | acatcaa | | 107 |

<210> 77
 <211> 401
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(401)
 <223> n = A,T,C or G

| | | | | | | |
|------------|------------|------------|-------------|------------|------------|-----|
| <400> 77 | | | | | | |
| gactgaggct | tgactcccc | gggggntctg | cctctgcntc | tcttgccctc | gctgttgttt | 60 |
| ccctctctgt | ccagctcccc | tcccgnctct | gccctggaga | atggctcaaa | aggagaacgc | 120 |
| ctaccctggg | ccctacggct | caaagacggt | aaggctcctg | ccacattccc | cgccccacgt | 180 |
| cccccggaag | aagagtccat | gaagatagag | gctggccttg | caaatggccg | gactctaagc | 240 |
| gtntncgacg | tgtgggcctc | aagaatttgc | ttgcaaaaact | cagtctgatc | acttgacgtc | 300 |
| ttaccgtagc | agatgttgcc | aacctgaatc | tgagggcttc | cgtagagctg | agcctgctcg | 360 |
| tcacgtacaa | taatagttgg | gactgagcaa | acatcataaa | a | | 401 |

<210> 78
 <211> 127
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(127)
 <223> n = A,T,C or G

<400> 78
agaagaacaa cgtaananaa tgantgcttc tctggtaaaa cannggggag ggggntatta 60
accttcnagg atnctgtttt tcgcacttct catcannaag aatgggaatg tctcaatfff 120
gctcaga 127

<210> 79
<211> 145
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(145)
<223> n = A,T,C or G

<400> 79
ctgagtgtga tccctgggac ccacatgatg gaanagaana gagcaacctc ccataaactg 60
ncctctgact tctacaccaa ngctgtatgt agcatgtnc cccacacctt catgcgcata 120
cacaacgaaa ataaaaagca aaaga 145

<210> 80
<211> 110
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(110)
<223> n = A,T,C or G

<400> 80
ggattctagg gaatgacana atttcctgga ngatgaatgg agggngggna tgntaccctg 60
tgcctgacgn aggcantaac cgtgncagat ngtgacaatt tagaaaatat 110

<210> 81
<211> 322
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(322)
<223> n = A,T,C or G

<400> 81
tgtaaaggga aataagggac ggcctgaaca gacttcctgc tncnctgttt ggggnngggg 60
gngatggcca cagttaacaa aggcaaacca caactaaggga aaaagggtaca tccagcantg 120
gctaattcca caacnaaagt catatcggaa gaaaagatgg ngtcgtttct ttactttnaa 180
nataacccag aggtcatant aaacaatang nggggagatc gaaaggctct gctatcacag 240
gntccagtgg caaaaggag tgtgcagact tggggggcca naattgcatn ncaacgcaag 300
cagcattgca tgattttggc ac 322

<210> 82
<211> 108
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(108)
<223> n = A,T,C or G

<400> 82

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| gactgagcct | gcctggatgg | cagtgagcct | cagttcgttt | aggtcgtctc | tacctgttca | 60 |
| gcttcagtga | gcacaacacg | ggtaaacctn | tgcttgagct | cgagtcct | | 108 |

<210> 83
 <211> 277
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(277)
 <223> n = A,T,C or G

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| <400> 83 | | | | | | |
| actgaggtgt | gacgaagaac | agtctctgta | catgaagacg | aagacgactg | ctctgggctc | 60 |
| aggtatatct | naaccttggn | tctgatctgn | gagaaaaaga | gaccacctgg | atctggcatc | 120 |
| ccggnntttg | aatccaaaca | tcctctctct | gaggntnttt | ctcctnaggg | aagnttcccg | 180 |
| ctngncagct | tnganacct | canaagagag | ccttgnattg | gaaacgtctc | cgttaaangc | 240 |
| gataacatgc | ccttcgntat | tcaccacaaa | aaaaaaa | | | 277 |

<210> 84
 <211> 133
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(133)
 <223> n = A,T,C or G

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| <400> 84 | | | | | | |
| actgagaaag | ctgttttttt | taattttgat | tttctcaaga | cataaagtga | aggctgcttt | 60 |
| tcatctgtct | gcactatcgg | nntggngnn | ncganngcca | aactaaccgt | atataaccct | 120 |
| aggaaacttt | taa | | | | | 133 |

<210> 85
 <211> 332
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(332)
 <223> n = A,T,C or G

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| <400> 85 | | | | | | |
| gggccttgga | gcctagaatg | acagcaaagt | aaaaccagtc | tcaactcctg | aaggctctcg | 60 |
| nnctgcacca | ggaatgcgtc | catagccaga | tcctgcaggg | gagacctgac | aagatgagag | 120 |
| acagcacaga | cttggaagcc | ccgcctcctc | tgtggatctg | aaggctcctc | tgtagaaaag | 180 |
| acaggacctg | gggcctgaga | ggcgaggccg | ctcaacaaca | gaacagctca | tgatgaagct | 240 |
| gagtctggcc | tcgaactcgt | ggacttgagc | ccctgagcaa | ccatgcctgg | cttggcttta | 300 |
| ctgttaaaaa | tacttctctg | taaaaaaaaa | aa | | | 332 |

<210> 86
 <211> 327
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(327)
 <223> n = A,T,C or G

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<400> 86
actgagggca gcatcgagc cggcccaang gcaggggagc gcggggcaag ctcacttggg 60
tcctggaaaag gccaaaggcg ctcagaagcc caccgcccag gacttgogac aagctgggag 120
gcggccgaag acagtccttg ngagagatgc ccagnatccg gcgggggctgg cttcgagat 180
gcccgggtgcc canccagget gtccgctgag atgcccgtgc ggctgcttga tcggctcgga 240
gcagcttccc ccaggaatga ctccagccgt ctgggaagca aggagggaca gggtttgag 300
caataaatgt ccccaaggcc cgaaaaa 327

<210> 87
<211> 182
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(182)
<223> n = A,T,C or G

<400> 87
accgaggact tcagggccct gnanaagact gttgaggaca tnaanntatt ctaanccacc 60
ctcctgntct tctttctcct nctgtcccnc atnatncca tggaaagcct tgccctggact 120
attctntcat gcttnggaac tntctggatt tctacnctca nanacatgct ttgtactggc 180
ta 182

<210> 88
<211> 198
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(198)
<223> n = A,T,C or G

<400> 88
agatctcata cacagttgcc aaactgaatg ctgccatttc agaacgtgaa gaggntanag 60
ggagannnga nctgnttnat cctgttanng tagactgnaa gctatggcaa aagagcnanc 120
acaagagctg acaccagatg tnnacaangc ccatgagttc tcnacctgan gctngatact 180
tcctaattag acgacaga 198

<210> 89
<211> 409
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(409)
<223> n = A,T,C or G

<400> 89
gggattctag acctggatga catcctnngg gacggngctg atgacaaaga cagactggta 60
gcagtatttg atgaacagga tccccaccat ggaggagatg gtaccagcgc cagctccacg 120
ggaacccaga gtccagagat attctggcag tgagctgggc accaacaata gtttctgctt 180
ttcagcctta tcaagccaca agtgaaattg aggtcacgcc tttagttctt cgggcaaata 240
tgectcttga tgnccngccg gagcancgac ccagctttaa ctggccttn cacttctgtc 300
agtgatanca actnttccta agaggagncc tccaggaaaa accncgaccc gntgggtccac 360
gacagctngn tttctcaagc aaacaccngc tgggaagtcc caaatcctg 409

<210> 90
<211> 103
<212> DNA
<213> Mus musculus

```

<220>
<221> misc_feature
<222> (1)...(103)
<223> n = A,T,C or G

<400> 90
tgctaaatcc cacacagtaa taaatccggg acctcctgan acagntgnen cangagcnen      60
nggctttatt nttgaagcac cttccacccc caacttcctt gac                          103

<210> 91
<211> 104
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(104)
<223> n = A,T,C or G

<400> 91
cctcatgcta atgtaatgca cggcncnnac cctgaccag tgactactgg tgggccatag      60
cnngetcacg ntgaagccct gcacaccctt gacctgagct ggat                          104

<210> 92
<211> 239
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(239)
<223> n = A,T,C or G

<400> 92
cagaagacat cccaccacat ggnccctgtg tttgtcctga tgagcgctg cctggccacc      60
gcaggtaatg caccttctca attgggaggg tcttaacctt ctcttgaatt cctatttcct      120
tctccctca gtctctttgg ctaaaaatat ttagtcata ttatcttatg taaaatgtga      180
atatttatgt tatttaggta aataaaatat ttgactatca tactgataca taaaaaat      239

<210> 93
<211> 322
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(322)
<223> n = A,T,C or G

<400> 93
gagtgtctggg acttgaaccc agatctcagt gtctactaca ttctcaaccc tgcttctcca      60
aagacagcgt ctcanctata ctctgtagcc atgggtcagcc tgggaactccc aagagatctg      120
cctccggagt gctgggatta aagatttcta ccactacacc gtggccttac aaacggaggg      180
gataggacat catttaattc ctgaagagtt cctcagacaa tcagttctta ggccatccac      240
aaactgatca cttggtttgt tgctctcctg aatgtggctt aatgaaatta aatgtagttt      300
ctgccccagt gaaaaaaaaa aa                          322

<210> 94
<211> 359
<212> DNA
<213> Mus musculus

<400> 94

```


| | | | | | | |
|------------|------------|-------------|-------------|------------|------------|-----|
| atccctgcgg | tgggtgggaa | ggagctggat | cttcacgggc | tctacaccag | agtcactact | 60 |
| ttaggcggat | tcgcgaaggt | ttctgagaag | aatcagtggg | gagaaattgt | tgaagagttc | 120 |
| aactttccca | gaagttgttc | caacgctgcc | tttgctttta | aacagtatta | cttgcgagcc | 180 |
| ctgggtccag | tgcccagcat | ctcatagccc | agatctgggtg | gcacatgcct | gtgattacag | 240 |
| cactgggaaa | gacatgagag | cagagaggaa | aggacaagag | aagagaaaat | ggtcacctta | 300 |
| taagtgtttg | ctgtaaaaaa | gttttttatca | ttaaaagatt | ttaaatcaca | aaaaaaaaa | 359 |

<210> 95
 <211> 116
 <212> DNA
 <213> Mus musculus

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| <400> 95 | | | | | | |
| gtaacatctg | cacctgggtc | caggetccaa | ggatgaattg | gtgggaatgg | gcctcccccc | 60 |
| accttttata | agtgcattct | ccattaaaca | tttgagcctt | gatcaaaaca | aaaaaa | 116 |

<210> 96
 <211> 271
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(271)
 <223> n = A,T,C or G

| | | | | | | |
|------------|------------|-------------|------------|------------|------------|-----|
| <400> 96 | | | | | | |
| tcccaccgct | cgaggctcac | attgggttcn | tgaagtatga | tcaanggnct | ggcttncctt | 60 |
| tnttacntga | cacttncttc | cctgnncgac | aggggccgtn | gctganannn | acctgaagat | 120 |
| gagatncana | ccctgganat | atggnggcgc | angccactgc | ngctgcagga | gatgngcact | 180 |
| gtcgttttat | gtttcctaga | tcagaaccan | gctacagccc | aggaaacacc | tgtttctgta | 240 |
| aataaagttt | tattagacag | aaaaaaaaaca | a | | | 271 |

<210> 97
 <211> 165
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(165)
 <223> n = A,T,C or G

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| <400> 97 | | | | | | |
| actgaggagg | ctaaagcaga | agggtcactg | ntacttgggg | agtgacttca | aggccagctt | 60 |
| caacaactta | gtgggaccct | gnctcaagta | agtaaaaaga | agactggaat | tatagctcaa | 120 |
| ttatagtaga | acacttgccc | attatgtatg | agaaaataaa | agaaa | | 165 |

<210> 98
 <211> 307
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(307)
 <223> n = A,T,C or G

| | | | | | | |
|------------|------------|------------|-------------|------------|------------|-----|
| <400> 98 | | | | | | |
| tggatgcagg | tccaaccaac | ggatcctntg | nggtccaaac | ctnntcaanc | caggagcccc | 60 |
| cgangncacc | gccctgtgag | cctctncttg | cggatgcccc | accagcccgt | cacaagctgt | 120 |
| cacccgagtc | tccgagaaat | tctctgggga | gacctnagnt | tcagctctgt | cacccacatc | 180 |
| tgctgccatt | gtggggggct | tcaccccaag | ccctagnagag | gcgcacacgn | ccttggactc | 240 |

ccagacccac tgaaaaaagt ncntottttca ctcaggncctt tgncttggnc tctgggtatg 300
ggagcag 307

<210> 99
<211> 354
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(354)
<223> n = A,T,C or G

<400> 99
ctcgagccaa gaacctttcg cccgccccgc ccgcgcgacc cgtcccactc tgcgcccngn 60
ccngcccgcc aatggaaaag ctgcaaattg cgcgaccagc ctgccgcggg cgaccggcag 120
aaattcgggtg tgtgcaagcc cgggaagget ccgtcagacc tggaggtggg gacagcgtgt 180
tgcaggcccc ggggagatgg cgcctacacg cngnncggcc tccatctctc ccagggttcg 240
ccaagccacg gcgcagccaa ttggctcgga gacatggcgg ggtgcctttt cgccttggtc 300
ctctgcggca ctctgctgcc gataatcgac gccttggaac tggaaaaaaa aaaa 354

<210> 100
<211> 370
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(370)
<223> n = A,T,C or G

<400> 100
gcttctgcta cttctgcctc attgttccgg acncacggng nagnnatgct ncnangactn 60
ttttatcaat ttggagntgg aancncaccn cgcncgncct ttnattagnt agnctgggtg 120
catcaacct tactacctg naggnnttga anggattagc cccatancct gggggttttt 180
actttttcca gacaagntct caagnatccc agggngggctt cctgactctc tcnagtanc 240
gaggataacc atatacttct gatccccacct gnacctnctg agtcctgttt taatggggng 300
ctgagactcg aacccatggc ttcncanatg ctanganac gcttttctgag ctgagctcca 360
ccccagcct 370

<210> 101
<211> 104
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(104)
<223> n = A,T,C or G

<400> 101
ccagcctggc ctacattgag aaacctcatt ttngnaaagn naaatacttc gtcaattaac 60
atcgcanntg gttcaataaa gacttttggg aagtgtcaaa aaaa 104

<210> 102
<211> 261
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(261)
<223> n = A,T,C or G

<400> 102
atgtctgact gcacctggga ggaccctatg tcgcaaattng gcttatttcc cctncgnaga 60
cctantcaca ngtcacncag tnnngagcgt tcggtacaga tttccgggan ggaacacaca 120
ggtcatttgc gcccgaaact tgcncgtgtg cttgcgccat ttcctgcatc ctggcgcgcc 180
tcctccctcc ccacctncct tctccgagcg ncttaagccc aggcctccgg cctccgtctc 240
tgaggggtcct tggggggggcg g 261

<210> 103
<211> 330
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(330)
<223> n = A,T,C or G

<400> 103
cgaggagaag tacttgactc tttatannan tctgannnat cttggacggg actatncann 60
aggagcaggc tatttttaaaa ggcgnnnngna gancgcttnc cntancttca aggatgcgga 120
ggacccanana aanatcactn nacttatccc acgaggagan cttgcattga angagctaga 180
ngccntgccc ttncettanga aatacagagc nctgntgctt acgttactat tcagatncca 240
aagtctgacc aatcattgca ccagtcgagc tgacaaccag tgctggctgt ttgcctgtac 300
caactattaa aaaataattc agttttaaaaa 330

<210> 104
<211> 107
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(107)
<223> n = A,T,C or G

<400> 104
ctgacattat gggattgcag actaagaagg ncctactgac cccctcata catccagctc 60
gcccttttgc agtttcaaac catgaccgaa gtagtgaaaa aaaaaaa 107

<210> 105
<211> 129
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(129)
<223> n = A,T,C or G

<400> 105
aactgagatg tctgagagca aacaggtacg aagacagcgg gaccagtgcg tcaactcagta 60
aagcangcaa agaaacttcc tgtaagcgac aaantagaga agggtcctgg gactcttcac 120
tggtgatga 129

<210> 106
<211> 128
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(128)
<223> n = A,T,C or G

<400> 106
 tgtgttgaca gtgttttact cgaggatttg ngtnacnagaa acatcagngn gatcacactc 60
 acgaaataat ggnacnggag acattgatgg aaantttcat tcctcttatt catgattcag 120
 actgagaa 128

<210> 107
 <211> 120
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(120)
 <223> n = A,T,C or G

<400> 107
 acactgtgca cctttactac tggaccagag attattcgcc cggnaattgg ntncntncc 60
 ccttgcttca taactgagtg tngcaacagt gaanattgga gctttgatca gaaaaaaaaa 120

<210> 108
 <211> 255
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(255)
 <223> n = A,T,C or G

<400> 108
 tacagggaaat caggannccc tcccccttcc ttcatanctg agtggtgnaa ctannnggan 60
 tgcagctnan gatcanatnc tgaaganaaa ctctatgaat atagacaatg nggtaaagtt 120
 tttgcatgnc acagtcattc tcaaagncat gaaagaattc gngctggaga ggaatcctgn 180
 gaatgtaatc aatgtaataa tcacagtact cttcaaaatc ctgaaaaaaaa tcatactgaa 240
 gagagactat atgaa 255

<210> 109
 <211> 155
 <212> DNA
 <213> Mus musculus

<400> 109
 ttacgacagg aagaagcctg acataagcca gttacatgct catcaccctc gcgagaatgc 60
 tgtgcaggag ctgaagactt gctttcagtc ctcacacctac agtgactgcg gcaccggaag 120
 tcctggtatg ggttgaacaa accaccagcg ttaaa 155

<210> 110
 <211> 404
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(404)
 <223> n = A,T,C or G

<400> 110
 tgaggggaaag tcatggaggc ttcaggntct tcttcccagt ctcaagacag tgggtggagtc 60
 cacaggggaaa cggaagatca ctaccaagga gacatgagct ccacnagcat catggggaagg 120
 cccggnagcg atanangaga gacaggtntt nctcttcac ctcnatctcn gcattcttctt 180
 cctcctnttc ctcctnatct tcttcctnct cctnagnncg cntcnatgan gaccagnctt 240
 ncntaggtcc cagnnnncac naaaggangc cccncaggga caganttgcg tgggtgcatga 300
 ccatggngaa ctgnaagngc taaaggacga gcttnanctc tgcgnagggtg ctgctgcgga 360

aatggtncct actggcgagn caggactcct aaggagaggt tacg 404

<210> 111
<211> 108
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(108)
<223> n = A,T,C or G

<400> 111
gacatgatac ggatgnccgg attcanctgt taaagcagtt actggaggac tccacctnan 60
atgacgacgg gagcagctcc agctcctcgg gggacagaga gaagcgca 108

<210> 112
<211> 485
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(485)
<223> n = A,T,C or G

<400> 112
gactgaggta aacttggnac cgntcaanag gtagtggatc tnacagaccc canccgtnc 60
cgcttcactc tgcaagagct ganggaggng ctgcaggagc gaaacaagct caagtcgcan 120
ctgctgctgg tgcangagga actgnagtgc tacaggagtg gtctacttcc acccanagan 180
actncaggag gaagaagaga gaaggatgct gtggttgcca tgggcaacgg cgagaaggag 240
gagaggacca ttatgaagaa gctgttctct ttccgggtcag ggaagcatac ctagactgaa 300
aaccatcacc aagatgggtga ccctcttgac ttgagaagac aattgccaat atgccttctg 360
gaaccacctt cctgtgtcag gaatgtgcct tggcttgctc ctgcacagag cagtcagagg 420
aagatgctcc ctcccatggc tcacctgctc tctggggaca gacctggaca gtcagtaagc 480
tttga 485

<210> 113
<211> 378
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(378)
<223> n = A,T,C or G

<400> 113
ttttgctgat cgccttgcaa gttttcatcg agtttggagt ttcccaccaa atgaaagtac 60
aggaaaagaa gtgacctgct tggcctggag accagacggc aaacttttgg cctttgctct 120
tgcgataacc aagaaaatta ttttgtgtga tgtagaaaag cctgaaagct tacactcctt 180
ctctgtggag gctccgtct cttgtatgca ttggacagaa gtgactgtgg aaagcagtgt 240
tttaacatcg ttttataatg ctgaggatga gtccaatctt ctottgccta agctgcccta 300
gacccggacg tantcatcaa agtggagaaa cttgaccctg agttggactc gngaccacgc 360
ttgacagcat tgcgttag 378

<210> 114
<211> 136
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature

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<222> (1)...(136)
<223> n = A,T,C or G

<400> 114
tgtagaagag acactggcgg ccagcttgcg cttgggggga aacgattgaa catagtatng      60
gggtccatt tnactaacc aggctacatt gncganaact aacagcntga agntcctgac      120
ggccttcttg ccagtt                                     136

<210> 115
<211> 331
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(331)
<223> n = A,T,C or G

<400> 115
aactgaggtg gaaggacaca tacgctgacg ngctggcaat gcgatccatg gtgcgggttta      60
ncggaaggat ctagagacna gtcagctgac cctgagtagc caatgagaat tctccagttg      120
ctgctttaaa ttagagccgt ggccattaca ggagccgtca ctttgcttgc ctgccacgga      180
atccagggtt gtgcacctgg agatcccttg gggcccgatg acctgaagcc ttccccacgg      240
aaaaactgaa gcctgaacac tgtctacttt tcctccatct ttctttctct tagatggtga      300
aataaagaac tatcagacag caaaaaaaaaa a                                     331

<210> 116
<211> 461
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(461)
<223> n = A,T,C or G

<400> 116
gctgccacce tctggaggnt cccgagtcct ttgtggntct gngngaaaag actctgtgta      60
cantgtgcta cnganccnga gngcggcatg tncgtgtacct cnttgatttg cccanaacct      120
gcgcccagga nggtctggtg ctgnactggn tggactgacc acagtgcctg tcgtccagct      180
tgcccagctg gcatggaata taaggagtgt gtgtctcctt gccccagaac ctgccagagc      240
ctgtctatca atgaagngtg tcancagcaa tgtgtagacg gctgtanctc gccctgaggg      300
agantctctg gatgaacacc gatgtgtgca gagcttccga gtgtccttgc cttgcacgct      360
gggaaagcgg naccnctcen ggcacctncc tnttctcngg acttgtaacn ntttgtatcn      420
gcngancagc ctatggatnt ggagcaatgg aagaatgccc a                                     461

<210> 117
<211> 124
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(124)
<223> n = A,T,C or G

<400> 117
tgatcattag gaactttgat cagaatagan ggagcagagg tnctaaactc nattcnccag      60
aggcntgat gaatctntgg ntcagctnca gttnngtactc atctacataa aataaatgat      120
taaa                                             124

<210> 118
<211> 261

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<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(261)
<223> n = A,T,C or G

<400> 118
tttctactgg accactatat tattggggccg gganatctnn ntcccctncn cntngettcn      60
tnactgattg cttcatnagt ganagtggag ctttgatcat tgnagctttg atcagnattt      120
nnacnanaga cntttgnccn atatccnaag gngngggcat actggagaga aaacttatga      180
atgtaatcaa tgtggtaaaag cttttgtaag acccagtcaa ctccaaacac ataaaagaac      240
acattctgga gagaaaccct a                                     261

<210> 119
<211> 391
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(391)
<223> n = A,T,C or G

<400> 119
cagggaggat agccgatata tncttantga cagcttcnnc nncngtntng anactgncac      60
agctggactc tggngaccac tnacnntatg ggnantgatt gcctttcnnc gncaacagcc      120
cttccnnttt ntntacagn ttgtggngnc tatgggccag atatacgng atgagctgta      180
cttcctgaca gagctacacg aaggactcca gcatggggag ataggncacc ccgtttattt      240
ctggttctat tttgntttcc tgaatgctgt atggttggtg ataccaagca tccttggtgct      300
tgatgccata aagcatctca ctagtgccca gagcgtgctg gacagcaaag ncatgaaaat      360
taanagcaag cataactaaa gagccggaga g                                     391

<210> 120
<211> 326
<212> DNA
<213> Mus musculus

<400> 120
ctaaagctcc agggaataga aattcctgaa gggacacgat tacaaagcag acagtcagtt      60
ccttggtgaa atcatggaaa tcaatgaaag actcgcagac gcccaaagtg aggccgccat      120
ggaagagata gaagccactg tcagagctaa acagaaagaa tttactgaca atataaacag      180
cgcttttgaa caaggtgact ttgaaaaagc caaggaaactc ctgacaaaga tgagatactt      240
ttcgaacata gaagaaaaga tcaagctaag caagactcct ctcttggttg taacttaaag      300
ttttagaaat aaactttgta tttctt                                     326

<210> 121
<211> 452
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(452)
<223> n = A,T,C or G

<400> 121
gtggggtctt tcaacttgcc gggaggagca caagaagaag cacccgatg cttctgtcaa      60
cttctcagag ttttccaaga agtgctcaga gaggtggaag accatgtctg ctaaagaaaa      120
ggggaaatth gaagatatgg caaaggctga caaggctcgt tatgaaagag aaatgaaaac      180
ctacatcccc cccaaagggg agaccaaaaa gaagttcaag gaccccaatg cacccaagag      240
gcctccttcg gccttcttct tgttctgttc tgagtaccgc cccaaaatca aaggcgagca      300

```

| | | | | | | |
|------------|-------------|-------------|-------------|------------|------------|-----|
| tcctggctta | tccattgggtg | atgttgcaaa | gaaactagga | gagatgtgga | acaacactgc | 360 |
| agcagatgac | aagcagccct | atgagaagaa | agctgccaaag | ctgaaggaga | aagtatgaga | 420 |
| aaggatattg | ctgnctacag | agctaattgga | aa | | | 452 |

<210> 122
 <211> 415
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(415)
 <223> n = A,T,C or G

| | | | | | | |
|------------|------------|------------|------------|------------|-------------|-----|
| <400> 122 | | | | | | |
| cttcttgaga | gatcancctt | ggtgaanagt | tnctagcaca | caggtgacta | cgagaagggt | 60 |
| ntgnaccanc | tgtcaaagtc | cnttgctgtg | tgtggacagc | ctcagcagcc | tgntgcaagt | 120 |
| gtnacagnnn | actctttcgt | cnccagagtg | ngcnnatgct | tgtnaccaag | ctttccgacc | 180 |
| atnagtnaga | gaattggnag | ngctcaaagc | tnggntnnag | atgatgtgga | atgagccaga | 240 |
| taccaacaag | atanaatctc | agtanaataa | tctnaacnnt | taggcttgga | agctgggtcan | 300 |
| ctctggggga | ttaagggcaa | attatgctgt | catgaactgt | cccacactga | cgtnctgccca | 360 |
| aagcgaatat | gaactttggt | nagaccatt | gtctggncta | tttatttttc | cagta | 415 |

<210> 123
 <211> 427
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(427)
 <223> n = A,T,C or G

| | | | | | | |
|-------------|------------|------------|------------|------------|------------|-----|
| <400> 123 | | | | | | |
| tccgtccctag | aactgacaag | ccagattctg | ggagccaacc | ctgattttgc | caccctctgg | 60 |
| aactgtcgca | gagaagtgt | ccagcagcta | gaaaccaga | agtcccctga | ggagtgggt | 120 |
| gctcttgtga | aggcagaact | aggcttcctt | gagagctgtc | tgcgtgtgaa | ccctaagtcc | 180 |
| tatggcactt | ggcaccaccg | ctgctggctg | ctgagtcgcc | tgcctgagcc | caactgggcc | 240 |
| cgggagctgg | agctgtgcgc | tcgcttcctc | gaggccgatg | agcggaactt | tcattgctgg | 300 |
| gactatcggc | gattaaccaa | ngggnagnct | tttgttctca | ctgcananta | aaataatcaa | 360 |
| nactgacagc | ctgaccaccc | ngaacttctc | caactattct | tcctggcatt | atcgctcctg | 420 |
| cctattg | | | | | | 427 |

<210> 124
 <211> 260
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(260)
 <223> n = A,T,C or G

| | | | | | | |
|-------------|------------|------------|------------|-------------|------------|-----|
| <400> 124 | | | | | | |
| cctggggagcg | ttctgggggc | attgggcaac | ccctttcact | cctttctgagg | aacanatgat | 60 |
| tgccgaggct | attcctnntc | tgaaagcnc | catcnanana | ggcagangac | tttgnaaga | 120 |
| ncatgaantg | agaggngaga | gcctggan | ggatcccng | catcntncta | acttattcaa | 180 |
| tcactntgtc | tttggaacca | ctngagaatc | tatttngcgt | ctgatggagg | gtgtngagnc | 240 |
| agnatcatgc | atctcttcca | | | | | 260 |

<210> 125
 <211> 414
 <212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(414)

<223> n = A,T,C or G

<400> 125

| | | | | | | |
|------------|-------------|------------|------------|------------|------------|-----|
| ctaacgtaca | gaacagcttg | caagttaccg | atttgtacag | aagcgatgca | accttcatct | 60 |
| tgttgatatc | tggaatatga | tcgaagcttt | ccgagacaat | ggccttaaca | cgctggacca | 120 |
| cagcacggag | atcaggcgctg | tnccgcctgg | agaccgtcat | ctcgtccatc | tactatcagt | 180 |
| tgaacaagcg | ccttccttct | actcaccaga | tcagcgtgga | gcagtccatc | agtctcctac | 240 |
| tcaatttcat | ggtcgccgcc | tacgacagtg | agggccgagg | cangttgacc | gtgttttcag | 300 |
| ntaaagctat | gttagcaacc | atgtgtggtg | gaaaaatgct | ggacaaattg | agatacattt | 360 |
| tctcccagat | gtcagattcc | aatggcttaa | tgatgttnng | aaagcttgac | cagt | 414 |

<210> 126

<211> 146

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(146)

<223> n = A,T,C or G

<400> 126

| | | | | | | |
|------------|------------|------------|------------|------------|-------------|-----|
| gcttgctgac | aaagaagctg | ccgncctgac | catctancct | ctcagacntn | angctgnnga | 60 |
| ccatananct | anngacactn | aggntgntgg | agacctcacc | caggaagcct | ttgatccttat | 120 |
| aagtaaaggt | atgcgaaaaa | aaaaaa | | | | 146 |

<210> 127

<211> 419

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(419)

<223> n = A,T,C or G

<400> 127

| | | | | | | |
|------------|-------------|------------|-------------|------------|------------|-----|
| gggcgtgtga | ccccgctgcc | tcccccttct | ccctgctgct | cgtgtccaga | ggatgagccc | 60 |
| agccttcagg | accatggacg | tggagccccg | caccaagggc | atcctgctgg | agccatttgt | 120 |
| ccaccagggt | gggggggact | catgcgttct | ccgatnnaat | gagacaaccc | tgtgcaaacc | 180 |
| cctggttccg | aggggagcatc | agttctacga | gaccctccca | gctgagatgc | gcagattcac | 240 |
| tccccagtac | aaagggaagt | gtggtncnct | ganaccnnc | ttcccgtcc | tgtgcgcca | 300 |
| nagntggtgc | ccgcctnacn | tntgnccnct | ctntntgagc | acgcattncc | ctgcagcang | 360 |
| caagnngtcg | ggcagcanag | actgagcana | tngaattgacc | gtggggcata | taaggccta | 419 |

<210> 128

<211> 193

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(193)

<223> n = A,T,C or G

<400> 128

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| gacctcacca | cctccaacca | cagnccctcn | cacggagagg | tcttntgaca | gatgtcnatg | 60 |
| agaacaaccc | acnactnttc | gccggaagag | gaacatgtgc | nccagacctt | cntaannact | 120 |

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| tcaatatgat | cggagcatnn | atangagggc | gnctatgatt | ctacagagaa | ctgaaaggaa | 180 |
| aacttttgat | cag | | | | | 193 |

<210> 129
 <211> 474
 <212> DNA
 <213> Mus musculus

 <220>
 <221> misc_feature
 <222> (1)...(474)
 <223> n = A,T,C or G

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| <400> 129 | | | | | | |
| actgagcttg | agatccgaaa | agcgggtccg | aacacaggat | catagagacg | acgggcgcag | 60 |
| agcgtatccc | ctggcggcac | cacggaggta | acgcggaggg | cggctagagc | gtcactcgcc | 120 |
| caggcggtt | cctcttcggc | agtcctcctt | cccaacatgg | cgcagtcgat | taacatcacg | 180 |
| gagctgaatc | tgccacaact | ggaaatgctc | aagaaccagc | tggaccagga | agtggagttt | 240 |
| ttgtccacgt | ccattgctca | gctcaagggt | gtccagacca | agtacgtgga | agccaaggac | 300 |
| tgtctgaacg | tgtctgaaca | gagcaacgag | ggaaaagaat | tactggtccc | actgacgagt | 360 |
| tctatgtacg | tncccggtta | agctacacga | tgtggagcat | gtgcttattg | atgnnggaac | 420 |
| cggntactac | gtggagaaga | cagctgagga | cgccaaggac | ttcttcaaaa | ggaa | 474 |

<210> 130
 <211> 152
 <212> DNA
 <213> Mus musculus

| | | | | | | |
|-------------|------------|------------|------------|------------|------------|-----|
| <400> 130 | | | | | | |
| ctttatcttt | ggtggtcggc | atctgatgaa | caagcgagcc | aagtttgaac | ttcggaagcc | 60 |
| gctcgtgctc | tggtcgctga | ctcttgccgt | cttcagataa | ctgtttggtc | acgttgctta | 120 |
| gtaaaataaaa | gtccacacta | tgaaaaaaaa | aa | | | 152 |

<210> 131
 <211> 769
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(769)
 <223> n = A,T,C or G

| | | | | | | |
|------------|-------------|-------------|-------------|-------------|------------|-----|
| <400> 131 | | | | | | |
| gagcaagagc | agctctacct | gcgggtctggt | gtggtgacct | ccgcaacctt | tgagcagcca | 60 |
| gggcggcagg | tcaagctgtg | ggtgaagatg | gtgaccccg | taatcaagaa | cttcttctga | 120 |
| gaacaggaat | ggccttgatg | aagatgacgg | gcattgactg | ggtcagatcc | ttcaaccggg | 180 |
| cttcagcaat | gactccggtc | tgggtgtccc | agcgagctcc | tgtggggaca | atggagctga | 240 |
| gggtctgggt | gccctagggg | aggcagaacc | cactgttttg | atgctgaccg | tgaaaaaggg | 300 |
| aggcacggta | gggagagagg | cctggccctc | aacctcccca | ctcttttcag | agacaggcca | 360 |
| gtgactggga | gccatgaagc | gttcangcca | ggtgccangg | tctgagagtg | ccaaacatgg | 420 |
| aggaatgtga | accaaggact | tcgangtgac | tcttgccattg | cccgtaatgg | gctctgaagc | 480 |
| tgnatcttct | taaaacttta | atcttaagcc | nttttcaatg | ntcaantggg | cannagaaaa | 540 |
| acttggancc | gcaagnntca | anaatnccca | agcaaatggg | tnccctttcc | ttgaaacccc | 600 |
| cttccttggg | ggnaaagggg | cttaacttct | tcttggggga | cccttttangg | gggaaataaa | 660 |
| ggttantttt | tttttaggaat | gcccccnttt | tttttaaacc | cctttttttt | gggccccttt | 720 |
| aaacccccnn | aaanntgggn | ttgggtggggc | cccctttaa | acccttaa | | 769 |

<210> 132
 <211> 458
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(458)
 <223> n = A,T,C or G

<400> 132
 actgaggtga atgaggactc tggggnnact catggagaag atgcggttgt gatcctggag 60
 aagacaccat ttccaggtaga acacgtggcc gcagctccta acggggagcc ctgagctcaa 120
 gttgcagttc tccaatgata tctacagcac ctataacctg tttcctccaa ggcattctgag 180
 tgatataaaa acaactgtgg tgtaccctgc cacagagaaa cacctgcaaa aatacatgcg 240
 tgaggacctc cgcctgatcc gagagactgg agatgactac aggaccatca ccttacccta 300
 cctggaatcc cagagcctta gcatccagtg ggtgtataac attcttgaca agaaggctga 360
 agntgaccgg attgttcttg agaaccana ccttcttgat ggctttgctc tcntccaga 420
 cencangngg aaccagcanc agcttgatga cctgtatt 458

<210> 133
 <211> 114
 <212> DNA
 <213> Mus musculus

<400> 133
 gtactgaggc aagttacatt gcctcaacac agtacaccog acgggtacgt ggcgaaagca 60
 gcggagggtc aaagaaggat actgtgcccc aagaggaggt cccaaaaaaa aaaa 114

<210> 134
 <211> 204
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(204)
 <223> n = A,T,C or G

<400> 134
 gactgagctc cccctcccca gaggttaagca gccctccagc gccaaagcagn ttagcatgtg 60
 tgactctgga caagacaacc ttcccagggt tctgaccgta naggacgcaa naagacgacc 120
 atgtctgagg gcaagatctg aggactaggg atggngctca gacctgccac acccaaggtc 180
 tcttcagcac agcagaaagg aaga 204

<210> 135
 <211> 377
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(377)
 <223> n = A,T,C or G

<400> 135
 ttccctgggtg gactccagtc aagtgtcgac atttctgata tccattcttc ttatagtcta 60
 tggtagtttc aggtctctta atatggactt tgaaaaccaa gataaggaga angacagcaa 120
 cagttcttct ggctctttca atggcaacag caccaataac agcatccaga ccattgattc 180
 caccgaagca ctgttcctcc cgattggagc gnetgtctct ctccctcgnca tgttcttctt 240
 ctttgattca gttcaagtcg ttttcacaat atgtacagca gganntgnan aacnnnttc 300
 cncnnntggg gatatgcctn agtgantggn atcaccangg ctgctgctca ggctggnaac 360
 aaactaagat ttcccgg 377

<210> 136
 <211> 344
 <212> DNA
 <213> Mus musculus

```

<220>
<221> misc_feature
<222> (1)...(344)
<223> n = A,T,C or G

<400> 136
tccgaacaaa aagtggggtc tgtgngcccc ggaagnggac ataccgattg actgnnggga      60
aaggaaacat ggantcmeta actgangggc gccagacat gaaaacagac ctgtttctca      120
gctcgtgccc aggaggaatc atgctgaaan agacgggcca gggctaccag cgctttctcc      180
tctacaatcg ggtcaccaca cctccaaan aagtgtgtgg aggaattcca gtctctgacc      240
tcttgcttgg acttcaaagc cttcttagtg actcccagga ntcaagagga ctgcccgtg      300
tccagcaagt gaccagtgc ttccccgggt ctaaaaaaa aaaa                        344

<210> 137
<211> 121
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(121)
<223> n = A,T,C or G

<400> 137
aacataagca ctcacannat gaanccctgc caaaaaatgg aaggaaacct agaaaaggag      60
natganccaa agcctnagna nnagccaaca gccngagnaa aagcctctag gaggggcagg      120
a                                                                121

<210> 138
<211> 320
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(320)
<223> n = A,T,C or G

<400> 138
ccctgacatc ccttgagcgc agacccttct agccgattac atcaatgggt tcccgggaga      60
caccttcttc ttgctctaag acccttgaaa ccttgacat ggagacttcc gacagctcta      120
gccctgatgc tgacagtcct ctggaagagc aatggctgaa atcctcccca gccctgaagg      180
aggacagtgt ggatgtggta ctggaagact gcaagagacc tctgtccccc tctcgcctn      240
cgacaggcag agagatgata aggnacaaac tcnaagcgaa ccgncngagc attgaanaca      300
tntgtctctg ctgaggaact                                         320

<210> 139
<211> 418
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(418)
<223> n = A,T,C or G

<400> 139
tgccctgcat cacctgggtg nggcagtgc aagcccggtc agtggccctg gcaggtcagc      60
atcacctaca atggctacca tgtttgtggc gggctgctcg tgtcaaataa atgggtggtg      120
tctgtgtctc actgctncc cagagaacac agcagggaag cgtatgaggt gaagntggng      180
nccccaccag tanactccta cagcaatgac actgtggtec acacagtgnc tnagatcatc      240
accactcaa gctaccgaga ngagggctcc caggggggaca tencgctcat ncgcctcanc      300
agtccgtgca ccttntcccc ntacatgang acaccatctg cctncctgaa gncaatgcct      360

```

gctttttcca acggncttc actgtctgn cacggaatgg gntcatgtgg ctccttga 418

<210> 140
 <211> 179
 <212> DNA
 <213> Mus musculus
 <220>
 <221> misc_feature
 <222> (1)..(179)
 <223> n = A,T,C or G

<400> 140
 agaaggtggc cactttnnac tatatgcatt tgaagatgtg ctccctccac ngaccaactc 60
 agccacctgc cacttgagg gtccacgggg gcaatgnngg gaggaagcan tggaggggct 120
 cccctaaac gtgggagtc aggctctgaa caataaatgg cctctcatgc tggcatgaa 179

<210> 141
 <211> 357
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)..(357)
 <223> n = A,T,C or G

<400> 141
 gaactgagct ggattaanca gctctccagt atgaacttca tagatggcag catcataatg 60
 tgacgtcacg gcttgaacat gactgacagc atcttcagct gctgaggtec ctcacagct 120
 catggtgact ccagtttgaa ctctcaagct gcctgcatcc agagcctcaa acccactgtc 180
 ctggtctcag gagcccatct acaagctcag aatgagggac cacatcctga ctctgcatca 240
 ctctgtccaa tgagcattgc ccacctaggg ccagaagtaa cataaaggaa taggcagtga 300
 atgaanaata gagagctagt gtgnggtac acacctatga ttccagcact tgggagg 357

<210> 142
 <211> 224
 <212> DNA
 <213> Mus musculus

<400> 142
 gactgagaga tgtggtatgg tgtgttcctg tgggcactga tgtcctctgt gttctttcat 60
 gtccctgccg gactgctggc cctcttcacc ctcagacacc acaaatatgg taggttcatt 120
 tctgtaagca tcctgttgat gggcatcgtg ggaccaatta ctgctggaat cttgacaagt 180
 atgttagaca ttaaaatacc ggtcaaaaaa gtgaaaaaaa aaaa 224

<210> 143
 <211> 414
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)..(414)
 <223> n = A,T,C or G

<400> 143
 gactgagccg ccctgcaggc tctgaagcgc aagaagaggt atgagaagca gctggcacia 60
 attgatggca ccctgtcaac catcgagttc cagcgggagg ccctagagaa cgccaacacc 120
 aacacggagg tgetcaagaa catgggctat gccgccaagg ccctgaaggc tgcccacgac 180
 aacatggaca ttgataaggt ggatgagtta atgcaggaca ttgctgacca gcaagaactt 240
 gcagaggaga tttccacagc tatctccaaa cctgtgggct ttggagaaga gttcgacgag 300
 gatgagctca tggcagagtn ttgagncttg ancaanaaga gttncgcaag aatttgttgg 360

agatcagtgg gcccgaaaca gtccctctac caaatgtccc ctccgtaccc tacc 414

<210> 144
<211> 248
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(248)
<223> n = A,T,C or G

<400> 144
ggactcccct aggattccga gcacctttcg ctgtggactc cagccccacc cgaggntgga 60
tgtggagctg aggaaactga cccaccgctt gctttcctgg gagccccctt ctctcctaata 120
tcatgagcca cgcaggatgc tggtcgcgct gcgctttcag aacgcctgct catagctgcg 180
tacaaaggcc aancannttn ntgtggnnnn gngnnatcaa caaggggtgcc aaggcagccc 240
gttaccaa 248

<210> 145
<211> 492
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(492)
<223> n = A,T,C or G

<400> 145
gacttcagga accatgccga agccacacag tgaagcaggg actgccttca ttcagaccca 60
gcagctccat gcagccatgg ctgacacctt cctggaacac atgtgccgcc tggacattga 120
ctctgcccc atcacggccc gcaacactgg catcatttgt accattgggc ctgcttcccg 180
atctgtggag atgctgaagg agatgattaa gtctggaatg aatgtggctc ggctgaattt 240
ctctcatgga acccatgagt accatgcaga gaccatcaag aatgtccgtg aagccacaga 300
aagcttttga tctgatccca ttctctaccg tcctgtttcg gtggctctgg atacaaaggg 360
acctganatc cggactggac tcatcaaggg cagcggcacc gctgaggtgg agctgaanaa 420
gggagccact ctgaanatca ccctggacaa ncgcttacat ggagaaagtg tgacgaagac 480
atccctgggg tt 492

<210> 146
<211> 465
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(465)
<223> n = A,T,C or G

<400> 146
actgaggaat ctcatgcact agggnaagga acctgaaaac ccagcagaca tgattgaaga 60
aggagagtgt atcctatctg tgaacatctt atatcctgtt atatttaata agcacaaga 120
acacaaacca taccagacca tgttggtact gggcagtcag aagctcacag aactgagaga 180
ttcaattttgc tgtgtcagtg acctccagat cggtggagaa ttcagcaacg cgcagacca 240
agccccctgag cacatcagca aagacctcta caagtccgct tttttctatt ttgaaggaac 300
atatttacaat gacagaagat acccagaatg cagagacttg agcagaacta ttatagagtg 360
gtcagagtcc catgatcgag gatatggaaa atttcagact gctagaatgg aagatttcac 420
atttaatgac ttgcatatta aacttggctt tccttactta tactg 465

<210> 147
<211> 111
<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(111)

<223> n = A,T,C or G

<400> 147

| | |
|---|-----|
| gactgaggaa aatcttctgg ntgtnatntt atataaccaa acatgtcatg gnccttcaca | 60 |
| gcatacnaat agttttgacg ttttaaatan aagtatccag cacagacaaa a | 111 |

<210> 148

<211> 425

<212> DNA

<213> Mus musculus

<400> 148

| | |
|--|-----|
| ggggtctttc aagagcagcc ggtatcagtt ccgcaatctg gcagaatgcc tacagaaaat | 60 |
| tcgagacatg attgccgagg ccagccaggt acccaaagag ccattccaagg aagatgctcg | 120 |
| gcttcagaga ctcaggattg aaaagatgaa tcgggaaagg ctacgacaga aaagactaaa | 180 |
| ctctgcccta aagaccagca ggaggatgac tatggactga agtcggccct cctgctggc | 240 |
| atagacctga gtgccagtgc agctcagcag agcactgaca cacacaggag acttttctcg | 300 |
| attaaccgcc ctgcccgagc agcgttcctt tggagggagg ctgcagatca tccagggctg | 360 |
| ccccttcctg tatccacctc atgaatcact ggctgcaata aacatcgaag cacaggaaaa | 420 |
| aaaaa | 425 |

<210> 149

<211> 243

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(243)

<223> n = A,T,C or G

<400> 149

| | |
|--|-----|
| gatgaccgag aagcgcttga aaaggagaaa gcaatacatt gaacgcntga gaaacctgac | 60 |
| tgaggaagaa aggcgggcag aacttcgggc aaatggcaaa gtcattacca acaaagctgt | 120 |
| ttaaaggcaaa tacaagtttc tacagaagta ttatcaccga ggtgccttct tcatggatga | 180 |
| ggatgaagaa gtctacanga gagactttag tgcacctact cttgaggaat ttgacaggat | 240 |
| ggc | 243 |

<210> 150

<211> 128

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(128)

<223> n = A,T,C or G

<400> 150

| | |
|--|-----|
| cctgagcggg gcattctggng gccgctgtct atgctctntt ttccnctgga nagaatattt | 60 |
| aaggaangct ccttcattaa gtattaagna tatggaaata aagaattact cagtcttaaa | 120 |
| aaaaaaaa | 128 |

<210> 151

<211> 528

<212> DNA

<213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(528)
 <223> n = A,T,C or G

<400> 151
 cactgaggag tctagagcag gaggatottg agttnaagng naaggntggt atangtagtg 60
 tgtggagaac agctggnggc aacgagatgg ctgcttctgt cccatgggcc tgctgtgctg 120
 ngcttgccgc tgccgccgcc gntgtataca cgcagaaaca cagtccacag gaggcacccc 180
 acgtgcagta tgagcgtctg ggcgcagatg tgacgctgcc gtgtgggaca gcgagctggg 240
 acgcagctgt gacatggagg gtaaacggga cagatctggc ccctgacctg ctcaacggct 300
 ctgagctgat actgcgaanc ttaaaactgg gccacagtgg cctatacgcc tgttttcacc 360
 gngnanttct tnggacttgg ggccncnaaa gcctttttaa atntgggggt tgccgccgcg 420
 gggagcctgg tgcttcagct tgccgcttca acaacttacc ccaagggtt ctactgcagc 480
 ttggaacctg cccaaccccc acctacatnc ccaatacctt caaatgtg 528

<210> 152
 <211> 343
 <212> DNA
 <213> Mus musculus

<400> 152
 tgagagatta ctggcttcga gtcccaagcc tctggcatta gcttcctgag agctggactt 60
 acagagtgtt ttctttatgg taaaagggtt tatccacag cccacattgt caggaatggc 120
 tccctctaaa gtgaaagtgg ataaactcaa gagaaaggat tggatcatac acggtttttt 180
 ttctcctttg agattataat gaacatgggtc acaccacaag taaagtccga agtaggacag 240
 aaaacgctct gaaggcttgt ttgatcacc gttatcgta aaaatagctg acccctaaca 300
 atatgtaccc aaatataaaa tgtaataaaa aaataccaac aca 343

<210> 153
 <211> 481
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(481)
 <223> n = A,T,C or G

<400> 153
 attcatgggc attgcagtct aagaaggtcc tactgacccc cctcatacat ccagctcgcc 60
 cttttcgagt ttcaaaccat gaccgaagta gccggcgtgg ggtgatggcc agcagcctgc 120
 aggaacttat cagcaagact ctggatgtct tagtcatcac aactggcctg gttacgctgg 180
 tgctggagga ggacggnacc gtggnggaca cagaggagt ctttcagacc ttaagggaca 240
 acacgcattt catgatcttg gaaaaggac agaaatggac accgggtagt aagtatgtcc 300
 cagnctgcaa gcaaccaaag aaatcgggaa tagccagagt caccttcgac ctatacaggc 360
 tgaaccccaa ggacttcctc ggctgtctca atgtcaaagc cacgatgtac gagatgtact 420
 cgggtgtcta cgacatccga tgcacaagct taaggccgng ttaaggaatc tgcaactaaa 480
 g 481

<210> 154
 <211> 101
 <212> DNA
 <213> Mus musculus

<400> 154
 actgagggaa gtagcttcta acaatgaact atggcaacaa ttctgcttca aaacttacta 60
 atacaattgg atgaacagtt ggggcgtgtt tccaaagaaa a 101

<210> 155
 <211> 438
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(438)
 <223> n = A,T,C or G

<400> 155
 actgcgaaat tatcactttc tggccatgtt ggatttgaca gtctgcccga ccagctggtc 60
 aacaaatcca cttctcaagg attctgtttc aacatcctgt gcgtgggtga gacaggtatt 120
 ggcaaatcca cattgatgga cactttattc aacaccaaatt ttgaaagtga cccagctact 180
 cacaacgagc caggcggtccg gttaaaagcc agaagctatg aactccagga aagcaacgta 240
 cggctgaagc taacaatcgt tgacacagtg ggatttggag accagattaa taaagatgac 300
 agctataagc ctataatgna atanatngac ncccantnng atgcctantg caagaagaat 360
 tgaataattaa acgttctctc ttcaactatc atgacacaag gattcncgcc tgcctttact 420
 ttatcgcccc cacgggac 438

<210> 156
 <211> 451
 <212> DNA
 <213> Mus musculus

<400> 156
 actgagtatg acagtcattg ccctctccgg ggcctcaagg acgactttca cagtgcacaca 60
 gtactctcca tcttaaatga gcagcgcatt cggggcatct tatgtgatgt caccatcattc 120
 gtggaagaca ccaagtttaa agcccacagc aatgtccttg ccgcctcaag tctttatttc 180
 aaaaacatct tttggagcca tacgatctgc atttccagtc acgtcttgga gctggatgat 240
 ctgaaagccg aagtgtttac agaaatactt aattatatct acagctctac cgttgtggtc 300
 aaaagacagg aaaccgtcac tgatcttgca gctgcaggga aaaagctggg aatatcattc 360
 ttagaagacc ttagtgaccg caacttctca aattccccag gtccttacgt agtctgcatt 420
 actgaaaagg gagtgggttaa agaagaaaaa a 451

<210> 157
 <211> 475
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(475)
 <223> n = A,T,C or G

<400> 157
 aactgaggct tttgtggcta caggaaccaa tctgtctctc cagttttttc cggccagctg 60
 gcagggagaa cagcgacaaa cacctagccg ggaatatgtc gacttagaga gagaagcagg 120
 caaggtatac ttgaaggctc ccatgattct gaatggagtg tgtgttatat ggaagggctt 180
 ggattgatct ccacagattg gatggtatgg gttgcctgga gtttgatgag gagcgagccc 240
 agaatctgat gtcattgatg atagccaanc tggggaaatc atggtgaact tcacaggctg 300
 gttgaacaan ngtnaagtga tcagccctag atttaatgtg caactcaaag acccagaaaa 360
 tagcgganac atntgctctc acctgncact ggcttccagn gnactgacnn cttcagctgg 420
 agncatggac catgaagaac atgaggaana cacacncgaa gggaaaattc ttgtt 475

<210> 158
 <211> 438
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(438)
 <223> n = A,T,C or G

<400> 158
 agactgagga ggaatctttg agtatgcgga tgggtcccaac gccaggtca tgaacgctga 60
 agagcacgcc ttctgatctt ctgccaacat catcaacaga aacaggactc tgctgcccaa 120

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| cacgaccctg | acttacgaca | ttcagaggat | tcacttccat | gacagttttg | aggccaccaa | 180 |
| gaagggtaag | aacactgaaa | acatgcgtgc | aacacatcat | attaaccgta | gtcaccttgc | 240 |
| tacgggtctt | attgcatctt | tcgttggcat | cctactcgag | tagcaatagg | tagcatacat | 300 |
| ataaagcaga | gactgtatta | gccccagagc | acaccatctg | cctgccgtaa | aaagacttta | 360 |
| taagcacagc | gtgctgctca | gtgcccgcga | catcttgacc | ccagaaccta | cagaaaaanc | 420 |
| cttgaagttg | acaccggg | | | | | 438 |

<210> 159
 <211> 437
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(437)
 <223> n = A,T,C or G

| | |
|------------|------------|
| <400> 159 | |
| tgaggatacc | agcatgccag |
| cgatccagga | tccagcagaa |
| cagtcagagc | cagcagaant |
| aagaccgacg | aagaagatga |
| agtgtcctct | cactgtctgt |
| aagggtctgt | ttccagcaaa |
| tcatgtggca | caactgantt |
| tgcttcaaaa | aaaccca |
| | 60 |
| | 120 |
| | 180 |
| | 240 |
| | 300 |
| | 360 |
| | 420 |
| | 437 |

<210> 160
 <211> 224
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(224)
 <223> n = A,T,C or G

| | |
|------------|-------------|
| <400> 160 | |
| accagtgaca | attactacta |
| gcatttcttc | tgccaccacg |
| ccttgtcact | accagatctg |
| ggctggntca | tggaacacctg |
| | 60 |
| | 120 |
| | 180 |
| | 224 |

<210> 161
 <211> 176
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(176)
 <223> n = A,T,C or G

| | |
|------------|------------|
| <400> 161 | |
| actgaggaaa | atatatgcaa |
| ggnaatnntg | aatattataa |
| cttatgtatc | ctagtctaac |
| | 60 |
| | 120 |
| | 176 |

<210> 162
 <211> 357
 <212> DNA
 <213> Mus musculus

```

<220>
<221> misc_feature
<222> (1)...(357)
<223> n = A,T,C or G

<400> 162
gggctctttc tacatagctc tggtgtgtoct caangtgngt agaccaggct gcttcactga      60
gngctaggna ttaaaggaag gcaccaccac cccggnctctg ggccaatgan ancggcacna      120
aaagacccgn tgntgctcgt ctaccattta ctgattcatc tccactccag aagnctanag      180
anacagaaga cnatcngtnt cactncaatg gncanataac tgagtactga ctggctcagg      240
ngatcctaaa gncaactcac caatgtagca naagcccnag tgnaccgac tgaaggagaa      300
aacacaganc tacncattgc attnacctcc cctattattc attacatgcc accccac      357

<210> 163
<211> 529
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(529)
<223> n = A,T,C or G

<400> 163
gactgaggaa taatgtctca gccaatcagg atgaagaact gggtcattgag acattcctga      60
tgcaaatacga ccaggagaca aagaagtgtg ctttctattc cagcactggg ggctactgga      120
ccttggtcac ccatgggggc attcaggcca cagccacaca agtctctgcc aacaccatgt      180
ttgaaataga atggcatggc cggcggtggg cacttaaagc cagcaacggg cgttttgtgt      240
gcatgaagaa aaacgggcag ctggccgcca tcagcgactt tgtgggcgag gacgagctat      300
ttacctcaa gctcatcaat cgacctctcc tgggtgctgcg tggcctggat ggctttgtgt      360
gccaccgccc ggggtccaac cagctggaca ccaaccgttc cacttacgac gtcttccact      420
tgagcttcag ggatggcgcc tatcagatta gagggcngng aggtgggttc tggtagacag      480
gcagccatgg aagcgtgtgc agcgacgggt acttggcgga agatttcct      529

<210> 164
<211> 552
<212> DNA
<213> Mus musculus

<400> 164
atgagcggga ccgagtgcga aagaaaacat tcaccaagtg ggtcaacaaa cacttgatga      60
aggtccgcaa gcacatcaat gatctctatg aagaccttcg ggatggacac aacctgatct      120
ccctgttaga ggtcctctca ggcatacaac tgcccagaga gaagggcagg atgcgtttcc      180
acaggctgca gaatgtgcag atcgccctgg acttcctaaa gcagcggcag gtgaagctag      240
tgaatatccg caatgatgac atcacagatg gcaatcccaa gctaacgctg ggcctgatct      300
ggaccattat cttgcacttc cagatctctg acatctacat tagtggggaa tcagggggac      360
ccaccaggat aaaccaagtg agtgtttatc cactcacagc ctttcgtgac cctacatttc      420
catgcacagg tcagaagctg caccaatgag aagtcttcag gcgatgtaga aatgactgtg      480
gattctaata cacaccgaaa ttctgactga gaatttaaat tgcagaataa agttttaaaa      540
cctaaaaaaaa at      552

<210> 165
<211> 114
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(114)
<223> n = A,T,C or G

<400> 165
catggcatcc aaggatgaat nggccgggaa tggactttcc cccctttttt cccccctctt      60

```

ttctaaagcg ngctctgccat taaaaatttg aaccttgaga gaaaaaaaca caaa

114

<210> 166
<211> 239
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(239)
<223> n = A,T,C or G

| | | | | | | | |
|-----------|------------|------------|------------|------------|------------|------------|-----|
| <400> 166 | tccatatatg | aaatgagnaa | caatgaatgn | ccagtggagg | ttgcttgcca | gacaggagct | 60 |
| | gagcccacct | gcagccaagc | ctccagcact | aaggncacca | ncagtggaag | nactcanacg | 120 |
| | gatganagcc | atnaaggcnt | anctgantcc | agnanggaca | aatnccagnc | tnctgcccac | 180 |
| | catgccaaag | ctgnngatan | ccctnggcc | ccaccaagtc | ccctactgag | attaccgctc | 239 |

<210> 167
<211> 461
<212> DNA
<213> Mus musculus

| | | | | | | | |
|-----------|------------|------------|-------------|------------|-------------|------------|-----|
| <400> 167 | gataaaactc | catccgcact | cattctcaca | ccgacaagag | aactggccat | tcagatagag | 60 |
| | aggcaggcca | aggaactgat | gagtgggtctg | cctcgcatga | agacagtgct | tctcgtaggg | 120 |
| | ggcttacctc | tgccccaca | gctctatcgc | ttacggcagc | atgttaaggt | tatcatagca | 180 |
| | acccttgac | gacttctgga | tataattaaa | cagagctccg | tatcactcag | tggcataaaa | 240 |
| | attgtcgtag | tagacgaagc | tgacaccatg | ttgaagatgg | gcttttcagca | gcaagtgcct | 300 |
| | gacgttttgg | aacacactcc | tggtgactgt | cagaccatct | tggtttctgc | caccattcca | 360 |
| | gatagcatag | aacagctcac | agaccagctt | ctgcataatc | ctgtgaggat | catcactggg | 420 |
| | gacaagaacc | tgcttgcgcc | agtgtgcggg | aatcattct | a | | 461 |

<210> 168
<211> 457
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(457)
<223> n = A,T,C or G

| | | | | | | | |
|-----------|-------------|------------|------------|-------------|------------|------------|-----|
| <400> 168 | ttaggcccg | aggcggaacc | ggaagaccgc | ggtactgggtg | ccacgtccgt | tgctgtgctg | 60 |
| | cgaattccct | gagtgggacc | ctggaggggc | cgatggcaga | ttggactcga | gctcagagct | 120 |
| | ctgggtgctgt | ggaggacatt | ctggacagag | agaacaagcg | gatggctgac | agcctggcct | 180 |
| | ccaaggtgac | caggcttaaa | tcgctggctt | tggacatcga | cagggacaca | gaggaccaga | 240 |
| | accgttactt | agacggcatg | gactcagatt | tcacaagtgt | gactggccta | ctcacgggga | 300 |
| | gtgtgaagcg | cttctccacg | atggcacggt | ctgggcgaga | caaccggaag | cttctgtgtg | 360 |
| | gtatggctgt | ggtcttaatc | gtggccttct | tcacctcttc | ctacctcttg | ncgaggacaa | 420 |
| | ggacgtgagc | cagnnggagc | caagggcagc | caggcta | | | 457 |

<210> 169
<211> 313
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(313)
<223> n = A,T,C or G

<400> 169
 ggaaagaaga aatatgaata cggctccatc aagacccagc cccacacgaa gctcgcgtgt 60
 cattgggagc cttcagagca ggaggagggc cccagggtcg agctgggtgtg tacctgccat 120
 gttgctctgc agcaggcagc agagatttga ctcttcgttg caaattgctg ccgggtccaga 180
 tgctaagcca ggtttgcggg aagagctgct tgagagctgc tgctgtgcct gtgctgcana 240
 ccccgctgc tcgcatgtt gggttacttg tttgaaggga aataaaaagg gcaaaacact 300
 ccaaaaaaaaa aaa 313

<210> 170
 <211> 130
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(130)
 <223> n = A,T,C or G

<400> 170
 gtgtccacca cccacagccc agcggcctgc agcgatcntg acctnatctg cccactgan 60
 ccacngaata angnanccnn ccctactctc ttgaatacca tcaataaagt tcgctgcacc 120
 caaagaaaaa 130

<210> 171
 <211> 215
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(215)
 <223> n = A,T,C or G

<400> 171
 gcctccaggt atgaaatcca aacagatgtg catagacngg atccctgcga ctgtcagagg 60
 cagaagttca catggataac cctgtctcag gaggaaaagg agacgtcaag gacagangga 120
 gtggaaagcg aagcttcaact tcctttctag agaattctgct ncaancacca atatatatgt 180
 aaatgtgtca ntinatngaac tttcctgaca aatta 215

<210> 172
 <211> 121
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(121)
 <223> n = A,T,C or G

<400> 172
 tgccgttctt ttgtttctt ccgtagaaaa ctgtgtccgn agtgacaaaag agacagtgtc 60
 cgtttgttca tntgtgacat cagagnagcg tactgtagca catcncgaga gacagatgag 120
 a 121

<210> 173
 <211> 207
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(207)
 <223> n = A,T,C or G

<400> 173
ggaactctca aaggtcngac acgcgaagna tggcatgctt ncatataaan gncatctnna 60
nnnaagttca ccctntcggg nnntgcaggg tgactcaggg ggccctggctg ctgcttgtct 120
ggctttgttg aagagggatt ggggaagcag gggtgtggnt cctattttct cccaccntn 180
caagccncg gcaaggtctt tgtcgaa 207

<210> 174
<211> 391
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(391)
<223> n = A,T,C or G

<400> 174
gactgagtcc agcccaaaga gtaaacnaga naagcttggga gaagcccctc gccctgggng 60
ggtgctcttt gactttgnct nnganccgat gaccaccan aaccactgc tggagacaaa 120
cagccgctcc ccggggctga aggggtactgt tggaggtcat cgaacaagca agattatgag 180
gtttgttgat aagatcacca aatcaaaaata tttccaaaaa gcaacagaga cagaattcat 240
taaaaagaag atcgaagaag tctctaatac accagctgcc tgaggaaaag ctttggagga 300
gtcaaaaggc aaagggaagc cttctagttg tacagctttg ctctgaatgt gctcatttgn 360
ttgtccgtga gatgccagga cttggaaggt g 391

<210> 175
<211> 260
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(260)
<223> n = A,T,C or G

<400> 175
ctcctgccaa tgtggctnac tgcattgcatt angngctttg gatgacctga nctctggncn 60
acctgnancc acatggtagt naggctgctg acttgagag atggtgacaa gattgagtct 120
gtctggatga tagcatcctg tgccacctac tgatgactgg ttggtgtggg aagccacatg 180
tgccgttgca gagtgggtact gactactgct ggccaccacg cataagattg gacaaacaac 240
caatgtgtac atatgcagta 260

<210> 176
<211> 246
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(246)
<223> n = A,T,C or G

<400> 176
gtggggagcg tggattcttc tacacaccca tgtcccgcg cgaagtggag gaccacaaag 60
ttctgaagat gaactggatg tgcttttaca tggaacccca gaccaaagc gaaaactcat 120
ccgggaatgt cttactggag aaagtgagtc atcaagtga gatgaatttg aaaaagaaat 180
ggnggctgaa ctaaactcca ccatgaagac aatggaggac cagttatcct cactgggaac 240
aggca 246

<210> 177
<211> 535
<212> DNA
<213> Mus musculus

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<220>
<221> misc_feature
<222> (1)...(535)
<223> n = A,T,C or G

<400> 177
cacctccaga aattgagggga gaantanngc gagacttcat ggntgcgctg gaggcagagc      60
cctatgatga catcgtggga gaaactgtgg agaaaactga gtttattcct ctccctggatg      120
gagatgacga aaaccgggaa ctcagagncc aaaaagaaac cctgcttaga cactatncag      180
gnngaangtt ccnatcttct agaccaacgc tcctanccat gggatgatcan ggaatggagg      240
ggaataacac tgcnggggtct ccaactgact tccttgaana gagantggac tatccggatt      300
atcagancag ncagaactgg ccagaagatg caagcttttg tttccagcct cagcaagtgt      360
tagatactga ccaggtgag ccctttaacg agcaccgtga tgatggtttg gcagatctgc      420
tctttgnctc cagtggaccc acgaaccgct tctgcatttt acagangcga gacaattctt      480
cngaaagacn gntncngnnn aattctacat aagaaaatct gcttttgggg gctgg      535

<210> 178
<211> 597
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(597)
<223> n = A,T,C or G

<400> 178
gacatcaatg cttacaatgg tgaaacaccc acggaaaagt tgccatttcc catcattgat      60
gataagggca gggaccttgc catccttttg ggcattgttg atccagtcga gaaggacgat      120
aacaacatgc ctgtgacggc ccgtgtggtg ttcatttttg gccctgacaa gaaactgaag      180
ctgtctatcc tctaccctgc caccacgggc aggaactttg atgagattct cagagtgggt      240
gactctctcc agctgacagg cacaaagccg gttgccaccc cagttgactg gaagaaggga      300
gagagcgtga tggtagttcc caccctctcc gaagaggaag ccaaacaatg tttccctaaa      360
ggagtcttca ccaaagagct cccgtctggc aaaaaatacc tccgttatac accccagcct      420
taagtctttg cggaaattgg ggctgcacat gcacatccag tactggggcc tgaggatgtc      480
agctggcagc ccgtgggtcc ttgcancang tccgtagaaa gatcgtggca tgatcacaag      540
ccggcctgta gatcgtctgc tatactactg ggcattaaat ggaaatggcc ccaaaaaa      597

<210> 179
<211> 203
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(203)
<223> n = A,T,C or G

<400> 179
ccggccaccg gcggtctgtg aagaagcctc accgcctacc gtaccggcac cngnttgc      60
gngcgagatn cggccgctac cagaagtcga ccgagctgct gatccgcaag ctgccgttcc      120
ancgcctggt gcgcgagatc gcgcaggact tnangaccga cctgcggctt ccagagctcg      180
ngtgtgnatg gctctgcagg aag      203

<210> 180
<211> 125
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(125)
<223> n = A,T,C or G

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<400> 180
 aaggagagac aagggccttn ctgaggcagn acaaggaccc annanctacc cagtaatgca 60
 nnagggcggn ccnnacgac tganctctga tcctaacctg caaagtgaag tttcaatttc 120
 cactt 125

<210> 181
 <211> 137
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(137)
 <223> n = A,T,C or G

<400> 181
 cagtggctctt agttttgagg agcatctata caaaatgcat atacaantgg ttttagcata 60
 aacatnggag aaaagcgtct acactganac ataagagaag ttgttactga acatgtnata 120
 aataagggtgc aagaaga 137

<210> 182
 <211> 360
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(360)
 <223> n = A,T,C or G

<400> 182
 gtgtatgatg aaaaagatac agggagggtt cgttttgtag atcgtcagaa agagggtgaat 60
 gagaatttgc cattgatttg atagcacaac agcctgtgaa tgagggtggag caccgcatca 120
 taacctgcga tggaggcggt ggtgccctgg gccaccccaa ggtgtncnta aacttggaca 180
 aagaaacgaa aacgggggaca tgtggctact gcggngctgca tttcaancag nagcatcact 240
 agtgtgggnt gtgtcctggt cctctgactc ctatggaaca tctccacgct ggggtgttctg 300
 tgtgaggcca ctgctctgtg aatggtgtcc cttgttttga ataaaggatg ctcccaccat 360

<210> 183
 <211> 348
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(348)
 <223> n = A,T,C or G

<400> 183
 tccccacctt gcatcatgga anaaaatggg tggacccgaa aaatccacca tgggctactn 60
 agggtnacgc cactgcggtt tcacaaccag atgcactagg ggttcancag cnatcacttn 120
 tgggagcatc tcctaccatt tatacccagc agactgcatt ggcggnggca ggccttacct 180
 acaaacgcca ncnnactntc aggnaacaca aactgcggna ctgcagcaac aagctgcagc 240
 tgtnttacag cancaatatt cacaacctca gcaggccttg tatagtgtgc agcagcagtt 300
 gcaacaacct cagcagacca ttttaacaca gaatacgagg ctaggga 348

<210> 184
 <211> 310
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature

<222> (1)...(310)
 <223> n = A,T,C or G

<400> 184
 taagttccct ccagggcctc tgcactagna ctgcagtgtg ctccacatac atcactgtag 60
 gcctgacctc ctaacttgag ataaccggaa ccaagttcct gggatgcagt tgcatttcca 120
 acgtgatcca ctggggcctc aagagcanag gatgactgga gaggtagggg cgctgtattc 180
 ccagctcctg gctgagggcc tctccagccc caagagttgt cctggaagta gattngctgt 240
 ctccatggac atgtgancaa tgggaaaaag aagcatacat tcagnantac tgacaggaag 300
 aggacaagca 310

<210> 185
 <211> 271
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(271)
 <223> n = A,T,C or G

<400> 185
 actgagggag atctctggcn acctggnagt cacatttcat ggttgtgctc atcccttccg 60
 ggtccaggta cagagacgat gctgccacag tncgcgagca caagtaattn aaagggccag 120
 ggagtcggca acaagaactg gnaggagtna tcattcttaag ttagaagaag cagatcaaac 180
 aagtcttatg ataaaaactt tattgtctta aatatcaaag gttttacaca tcacgttttc 240
 ttcagaaagt tcctattaaa gaagaaaaat a 271

<210> 186
 <211> 389
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(389)
 <223> n = A,T,C or G

<400> 186
 acaggccata attactnttt ggggaactct caatagggcg nacaggaatc atggctgggtt 60
 ccatacaaga agcccgtgcc caancatgtg atgaagggaag agcggggggg ggtgtggccc 120
 ttaccantgg caccatccga gnggccatgg nggaaaaanaa tggagagcgt gtcctcatgg 180
 aggggaagct cactcacaan atcaacaccg anagctccct ctggaccttg accccggcag 240
 gtgtgttttg gtgaatctga ncaagggttg cgagtactgg tggagtggcc atcctggagg 300
 gggaaaagcc catcgacntc gacaanatca acaagggagc cctccatggc tactgnggat 360
 gaagaggaac angcattcct ggacaaaaac 389

<210> 187
 <211> 317
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(317)
 <223> n = A,T,C or G

<400> 187
 aaagagagca cctgtgagga ctgngttnaag agcnaaccca aggggggattc tgaccatttc 60
 ttcccgcctc cagccatgga ggagggggca nccattcttg tcaccacaaa aacgggtgac 120
 tacggcaagt caagtgtgcc aactgctttg caaagtgtca tggggatgga gaagccaact 180
 cactactagat aatgagcttc ctaactgggtg tgaagctgct ttgagaacct tctgtcagga 240
 gagctgggtg tttagatgtc gttaggatga ccgtttacca accaagaata cagttttttg 300

tcctttaaaaa aaaaaaa

317

<210> 188
<211> 213
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(213)
<223> n = A,T,C or G

<400> 188
actgaggctc aaaggaatga ctcaattcca agtctttcca caaacctctc agcaaacact 60
ccaacttant gaggcgcagc actggctcac atntagcatt ccancattct ggagatggag 120
agaagagagt ccaaagggtt gacccagnc tcggcctcag gcccgagtac aaaggacagc 180
cttaccanac caataaagct cacacgatga aaa 213

<210> 189
<211> 621
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(621)
<223> n = A,T,C or G

<400> 189
tacttattgt ggaactatna caggacagac atnattgaan nagttattac cntgtagagn 60
gtcnncnctgn tntnecgtgc gaccttgatc ttntttcact tgtacaagaa caaaggcagc 120
tacgtnacct atgancctgc agaaggggag cccancgcca tcctncanat ggagactgac 180
tcagccaagg gcagagagaa ggaagagtac ttcatctaata gcttcccagg ctggaggggc 240
caattcttgg ctccaacact aagccgctgc ctctgtagtt aggggaacgtt tgctctaaag 300
ccaggggagt gcgttggtg atacaggcac atccactcac ctcccaggac acagccccc 360
ataccggcat cactgactcc aggggtccaga gacatggaga aagctgttca tgatgctggg 420
ccttgataag gacagtgtc gaaaccgacc accaaagagg ggccatgcct gagttggaag 480
tgaggtcaca tgctggtcca ctttgncccc tccctattna cgaccaatag cccagtcag 540
ngctatncag ncttttctgg aggcaggaca ccncaggagg ggggtcggac ccagggnagg 600
gganagggag tctgaaaaag g 621

<210> 190
<211> 431
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(431)
<223> n = A,T,C or G

<400> 190
ctgagcatcc agcgagcagc cttggtggtt ctggaaaatt actacaaagg acttcacat 60
ctataacccg aacctcctaa cagcatccaa attccgagca gccaaagcaca tggctggcct 120
gaaagtctac aatgtagatg ggcctantan taacgccact ggtcagtccc gagccatgat 180
tgctgcagca gctcggcgca gagactccag ccacaacgag ntgnattatg aagaggccga 240
acacgaacgc aggggtgaaga agcgganagc aagactggta gtggtgngg aggaagcctt 300
catccatata cancgtctcc aggctgagga gcaacanaag tctcctggag aggtgatgga 360
ccccagagag gcagcccagg ccatcttccc ttcatgggcn ggggcacttg agaantacct 420
tggggcacc a 431

<210> 191
<211> 279

<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(279)
<223> n = A,T,C or G

<400> 191
gactgaggtg gttattggtg gcagaataaa tacttaatca atggagtga tgccaacaac 60
accanaagtc caagatctct tttgttctgt gggcctgaat gtaacaacc ctcaactttct 120
catcatgcag ggcagaatta ccgaaagtat taaatatgaa accaccagag atattatcca 180
tgattgaaga agctgctgga accaggatgt atgagtacaa aaaaatagcc gccagaaaa 240
ctatagaaaa aaaggaggct aagctgaaag aaataaaaa 279

<210> 192
<211> 774
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(774)
<223> n = A,T,C or G

<400> 192
actgaatgac tgcctggagg agtcacagtc ggatatcagc ctcgagctcc ctctgagcca 60
ggagacattt tcaggcttat ggaaactact tcctccagaa gatatacctgc catcacctca 120
ctgcatggac gatctgttgc tgccccagga tgttgaggag ttttttgaag gcccaagtga 180
agccctccga gtgtcaggag ctccctgcagc acaggaccct gtcaccgaga cccctgggcc 240
agtggccctt gccccagcca ctccatggcc cctgtcatct tttgtccctt ctcaaaaaac 300
ttaccagggc aactatggct tccacctggg ctctctgcag tctgggacag ccaagtctgt 360
tatgtgcacg tactctcctc ccctcaataa gctattctgc cagctggcga agacgtgccc 420
tgtgcagttg tgggtcagcg ccacacctcc agctgggagc cgtgtccgcg ccatggccat 480
ctacaagaag tcacagcaca tgacggaggt cgtgagacgc tgccccacca tgagcgctgc 540
tccgatgggt atggcctggc ttcttcccag catcttatnc ggggtggaang aaatttgatt 600
cccagtatct ggaaagacag gcagactttt cgnacacccg tgggtggacct tatgagccac 660
ccgangccgg ttntgagtat ccaccattca ctacaagtnc atgtgnataa ctctgcatg 720
gggggcatga accgccgact atcttacatc ntaccctgga aaattcaggg gaac 774

<210> 193
<211> 279
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(279)
<223> n = A,T,C or G

<400> 193
agctgttcca ccatactcct cttncccca tccttaccag acggctgtgt acccagtga 60
aagtgcctac cccagcaga gtccatacgc ccagcaaggc acgtactaca cacaacctct 120
gtatgcagca cctcctcagc tcattcacca caccacggng gtgcagccca atggcatgcc 180
agcaacagtc taccctgctc ccatccctt nntnctagag ncngcgggggt caccatgggn 240
gatggctgct gggaccacga tggccatgtc agcaggtac 279

<210> 194
<211> 485
<212> DNA
<213> Mus musculus

<220>

<221> misc_feature
 <222> (1)...(485)
 <223> n = A,T,C or G

<400> 194
 ctgaagcccc cgggtggaga tngnncgac tttttggaag tccataagaa ggtattttctt 60
 caagcangcc taataggatg gcatctaata ttttcggacc aactgaagaa cctaaaaaca 120
 tacccaagag gacaaatcct ccaggaggca aaggaagtgg gatctttgat gaatcgactc 180
 ctgtgcaaac tgcacaacgt ttgaatccac ccggggggaa gaccagtgc atatttgggt 240
 cccagtcac tgccactgcg cctctggcac acccaaacia gcccaaggat catgttttgn 300
 tgtgtgaagg tgaanactct aagtctgacc tgnaggctgc ancagactcc acaccagag 360
 gagagcagag tgacaaagga agctcaaaag aagtagagca tgcnaagata ccggagccca 420
 cacctacagt tgacagtcac gaaccagac tggggccacg acctcgctcc cacaacaaag 480
 tctctg 485

<210> 195
 <211> 464
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(464)
 <223> n = A,T,C or G

<400> 195
 tgggcctaca aatcatatgg ctncactcc tgaccnanng cncagcccc antccccccc 60
 tgagatttgt ggctgtgggc gactggggag ggtcccca tgcgccattc cacacagccc 120
 gggaaatggc caatgccaaa gagatcgcca gaaccgtgca gacgatgggc gctgacttca 180
 tcatgtctct gggggacaat ttctacttca ctggagtgca cgatgccagc gacaagaggt 240
 tccaggagac ctttgaggac gtgttctctg accgtgccct tgcgaacatc ccctgggatg 300
 tgctggctgg aaaccatgat caccctggca acgtctctgc acagattgca tactctaaga 360
 tctccaagcg ctggaacttc cccagccctt actaccgttt gcgcttnaaa attccacgta 420
 caaacataac tgtggccatn tttatgctgg acacagtgat gctg 464

<210> 196
 <211> 395
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(395)
 <223> n = A,T,C or G

<400> 196
 cctgacaatg agaaaagctc tagaagcagn ccaaagcata tacaactcat tntctngctn 60
 nagtgggtna tgaagataga tgnanttnc tgcacantn ngcncnaact nctggatatn 120
 ncangcntcn naantgngga ggagggcgtc ntncatcaat cacatctcac aggtaccagc 180
 ttgcaaagac ttctgggttc attttttagtc aaatagcagc atgtgtctta agcatagtca 240
 tgcattgctt agtgaggagg atacatatct gctaagaaat gtcactagga gatgttactg 300
 tgggtgtagag agcacctaca tagnctgcat ggtatataag tntaccact atttcctatg 360
 gatattgtta agagngggaa atgcaagggtg catga 395

<210> 197
 <211> 470
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(470)
 <223> n = A,T,C or G

```
<400> 197
acatccattc cgggtacact gaacccttcc agtaggacgg aaatcctgca tttcatagac      60
aaggcaaaagc ggtcccacca gcttcctggg cacctgactc aggagcacga tgctgtgctc      120
agtctgtctg cctacaatgt caagttggcc tggagggacg gggaggacat tatcctcagg      180
gtgcccattc acngatatcg ctgctgtctc ctatgtcccg agatgatgct gcacacctgg      240
tggtcctgaa gacagcccag gacccaggca tctctcccag ccagagtctg tgtgcagaaa      300
gttctagagg cctcagegca ggttccttgt cagaaagtgc agtggggccc agtagaggca      360
tggtgcctgg tcatcatggc cncagagagc aaggtcgccg cttgaagagc tgtgtccct      420
gctcagccng gtcttccaga tttgtttaca cggagtccac catcgacttt      470
```

```
<210> 198
<211> 489
<212> DNA
<213> Mus musculus
```

```
<400> 198
tgaggtcctg cccaccaagc catgtcttct aggcagcacc tgggctctgc tccgcctccc      60
tctaccactg atcaggatat gctctgggaa gtgggggctc aggcttcagg agaagccagg      120
actgctcttc ccaggaatgg ctgccagcac agtacagggtg gcaggcagga aggactacct      180
tgctctgctc cccctgaatg agagtgaact cgaagaacag ttcgtgaaag gacatggccc      240
agggggccag gccaccaaca agaccagcaa ttgtgtagtg ctcaaacacg tgccctccgg      300
cattgtggtc aagtgccacc aaacaagatc tgtggatcaa aacaggaaga tagctcggaa      360
agtcctccag gagaaagtgg atgttttcta caatggtgaa aacagccccg ttcacaaaaga      420
gaagctcgag gctgagagga gaaagcgaga gaggaagaaa agagcaaagg agactctaga      480
aaaaaaaaa                                     489
```

```
<210> 199
<211> 496
<212> DNA
<213> Mus musculus
```

```
<220>
<221> misc_feature
<222> (1)...(496)
<223> n = A,T,C or G
```

```
<400> 199
gactgaggac agtgtctacg tatatgtacc aaggntccaa ggangtagat gnccttgtgg      60
ctggaggcct caatgcctga tgtttctcct gattctgcaa cggagttgtg gaagacagaa      120
cctcaagatg caggagacca gggaggcaac acttgcatcc tcagggagga agccaggatg      180
ccccagtcaa ctgggggttg tttagggata gggttggagt cagcagagcc tacagccctg      240
ctcccagggy cagagaccct cccagagccg acagagcttc gtccacaaaa gcggaaaaag      300
ggcccagccc ccaaaatgct ggggaacgag ctgtgcagtg tctgtgggga caaagcctct      360
ggcttccatt acaacgtgct gagctgcgag ggctgcaagg gattcttccg ccgcagtgtc      420
atcaagggag cacgctatgt ctgccacagc ggtggccact gccccatgga cacctacatg      480
cggcggaaat gccagg                                     496
```

```
<210> 200
<211> 378
<212> DNA
<213> Mus musculus
```

```
<220>
<221> misc_feature
<222> (1)...(378)
<223> n = A,T,C or G
```

```
<400> 200
agcaaagtcg gcctcaaaaa cagagaaggc aagatggctt ctgaatcaga aactttgaac      60
cccagagctc gggctentnan ctntatnnnn ancatnnnn ngcctaggnc cgtnatcann      120
gtnngtgaga nnncccttgna tcttgagnag attanntgcc cnnatactag acaagggccca      180
gggctcagga agnnngagng gntggnncat ggctagcaan ggatgagggg gatctagtca      240
tccctgcgcc catccagcag ctgggtgactg gacagtctgg cctcttcact cagtacaaca      300
```

| | |
|---|-----|
| tacagaagaa agccattgac cgttcgtgag ttccgcaaga tcgccaatag ctgacaatgc | 360 |
| actggtgttt tatctget | 378 |

<210> 201
 <211> 385
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(385)
 <223> n = A,T,C or G

| | |
|--|-----|
| <400> 201 | |
| ctgtatatgg gcttgccctgg cccacccgag cagacttcgc agactctgga gaggccctaa | 60 |
| tgctacantn ctgactggtc tcaccagagg caactctnga atnttttacc gagagggtgct | 120 |
| gccaatccag caggcatgca gggcagaagt cgtgtttctc catggaaaag catttaattc | 180 |
| ccacacatgg gaacagctgg ggacattgca gctactgtca gagaggggct accgggctgt | 240 |
| ggccatcgac cttccaggtn ntgggaactc agccccttca gaggaggnga gcacagaggc | 300 |
| aggccgagtg gagtagctgg agagagtgtt ccaggacctc caggtgcaaa atactgngnt | 360 |
| ggtgagcccc tcaactgagt gcaag | 385 |

<210> 202
 <211> 491
 <212> DNA
 <213> Mus musculus

| | |
|---|-----|
| <400> 202 | |
| tgaggccttg tacagctcca tcaagaatga aaaattgcaa tgggccatag acgaggagga | 60 |
| gctgcgacgg tctctgtccg agttggccga tcctaaccctc aaggatcatca agcgggtcag | 120 |
| cggaggcagt ggcagcagtt ccagcccctt cctggacctg actcctgagc ccggggcagc | 180 |
| tgtctacaag cacggggccc tggcgcaaaa ggtgcacgca gacctgact gcaggaagac | 240 |
| acctcgtggc aagcggggct ggaagagctt ccacgggatc ctcaagggca tgatcctcta | 300 |
| cctgcagaag gaggagtatc agcctgggaa ggctctttcc gaggcagagc tgaagaatgc | 360 |
| tatcagcatc caccacgccc tggctaccgg cgccagcgat tatagcaaga gaccacacgt | 420 |
| cttctacctg cgcacagctg actggcgggc ctccctcttc caggctccga gcctggagca | 480 |
| aatgcagtcc t | 491 |

<210> 203
 <211> 346
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(346)
 <223> n = A,T,C or G

| | |
|--|-----|
| <400> 203 | |
| tcaatgagaa gacagnactc tgcacttggc tgtgcattca cccccaagtg tatggaagcc | 60 |
| atntngaagc agctnctcaa ttctcctgcc atgtctctct gttcaggatg ttccctgccac | 120 |
| tgaaccggag cctggcatcc agcaagcgct agccaagagc ttagcagtga ccacttgtct | 180 |
| actcatcggg ggacggccat cagcctggag gtgaaccagg gagagtcttg actataggca | 240 |
| cggccccagc atcagtggga tcttggggga gactttgacc atcagcagag gaggtttggg | 300 |
| gggacaatgt tattaaaata aaatgaccct tgccaagaaa aaaaaa | 346 |

<210> 204
 <211> 177
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature

```

<222> (1)...(177)
<223> n = A,T,C or G

<400> 204
aaggctgaca agcaccanat ggnaaaggca gngaagaaac tctatggcat tgatanggcc      60
aaaggcggtac gtttagcagg cttctgacta tgacactctg actgngacaa gaatattggg      120
atcatctaaa cngagtccag ctggataatt ntaaataatac ttttcccct acaataa      177

<210> 205
<211> 230
<212> DNA
<213> Mus musculus

<400> 205
actgaggata tgctgtcatt ctgggctgtc gtaatatatt tctctgcaga agagtgggaa      60
tacctgggtc ctgctcagtg gaaattatac agggatgtga cattggagaa ttacaacaac      120
tttgtttttc tggatcttgt ttctctacg ccatacctgg tcagatttct ggagcaaata      180
caagagcctt cagatgtgaa gagtcaagca gacatctcta tgtactcagg      230

<210> 206
<211> 328
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(328)
<223> n = A,T,C or G

<400> 206
tgacaccatc aaaaccaacc ctgatgacag aagaatcatc atgtgtgcct ggaacccaaa      60
agatcttccc ctgatggcac tgcctccttg ccatgccctc tgtcagttct atgtggtgaa      120
tggggaactg tcttgccagc tttaccagag gtcaggagat atgggtcttg gcgtgccctt      180
caacattgcc ngctatgtc tgctcaccta catgattgca catatcacag gcctgcagcc      240
aggtgatttt gtccacactt tgggagatgc acatatntac cngantcata tagagnnggt      300
gaaaattcag ntacagcgag aaccaaga      328

<210> 207
<211> 385
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(385)
<223> n = A,T,C or G

<400> 207
actgagggtg agtctttcct gctagaagaa gaaggacaag gtgctgnaga aggnccgnccg      60
gatagnactg aagaaagaag tagtggagga ggaggagaat ggagctgngg aagangaata      120
cgaaactgca ctggatggag aggatgntga tnaaggnnt gaagacnatg atncagctan      180
gcggcgctct nntcatgncc cctgcccctt gggcttgtgt tttggntttc ccttcnngtn      240
ctggnggtgg nccggganca cacacatccc gcccccttc tctgtctcc ctgctctggc      300
cctnccccag agctgtgacc cttgtccctt gacccanct ctentttcca tctctccttc      360
nctgtcctt ccccttctgc ctccg      385

<210> 208
<211> 185
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature

```

<222> (1)...(185)
 <223> n = A,T,C or G

<400> 208
 catgaggaat tggaaaaactc ttctgaggat tacctntcca gcctaaggtg tggggaccct 60
 gaacatccag agngcttttc tagnctcaac attacgntgn ggcactttac cttgganggt 120
 nagcaggngg nccnttgat ganattgtga aaacctcntg aaccttctag cagagggtgc 180
 tcgaa 185

<210> 209
 <211> 472
 <212> DNA
 <213> Mus musculus

<400> 209
 cttgcttggc tcgtccaggt gccaacagga ccctggttct gcaggaaatg tgaatctcag 60
 gagcgtgcag ccagggtgag gtgtgagctg tgcccgcaca aagatggggc attgaagagg 120
 actgacaatg gaggctgggc ccatgtggtg tgcgccctct acatcccga ggtgcagttc 180
 gccaacgtgc tcacgatgga gcccatcgtt ctgcagtagc tgccctcatga tcgcttcaac 240
 aagacctgtt acatctgtga ggaacagggc cgggagagca aagctgcctc gggagcctgc 300
 atgacctgta accgccacgg atgccgacaa gctttccatg tcacctgtgc ccagatggct 360
 ggcctgctgt gtgaggaaga agtcctggag gtggacaacg gtcaagtact gcggctactg 420
 caaataccac tttcagcaag atgaagacat tcccggccac ttccagcggg gg 472

<210> 210
 <211> 863
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(863)
 <223> n = A,T,C or G

<400> 210
 gatctgagtg tggctctgta caaacatttc ctttcccctc gcgatgggga gacctgctcc 60
 ggtgcatcca gagaactccg catcctctgc tgtgatatag atccagtcct tgtggagagg 120
 gctgaaagag actgtccctt ccctgaggct ttgaccttta tcacctgga catcatggat 180
 caagagagca ggaaggttcc cttgagttct ttcttgagcc agtttgggcg ttccgttttt 240
 gacatggtct tctgcatgtc agtaaccatg tggattcatc tgaaccacgg ggaccgtggt 300
 ctgtgcgagt tcctggccca cgtctcctct ctctgcagct acctcctcgt ggagccacaa 360
 ccctggaagt gttaccgggc agctgcaagg cgctgcgca agctgggact ccacagtttt 420
 gatcaattcc gctcgctggc catccgaggt gacatggcca agcagatcgt gcggatcttg 480
 acgcaggacc acgggatgga gttagcgtgc tgtttcggca acaccagttg ggaccgaagc 540
 cttctgctct tcagagcaaa gcacacccac gagactangc aatccccgaa tcgtcaacaa 600
 aaagagacac ngacagatta agaatncgaa aggccacggg acacacacca gtaaagagat 660
 acccggggag cttttaacac cggagaaaac gagtttggat ccagagagca tcaggcaagc 720
 ctttganaac tggcaagggg cttttggcna aaatgtcttg aaaccaagcc ggcttgaaaa 780
 gggcnccagt ncccggttn cccctggttg gntttggnaa aaaacttncc cncgggnaa 840
 atgaaattcc cccgggggac aaa 863

<210> 211
 <211> 143
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(143)
 <223> n = A,T,C or G

<400> 211
 cagagactga ccagtgtgga cgtgcggaac acagnagact caccagtgtg gattaggacy 60

| | |
|--|-----|
| tgccctcttga ggtggtaact gctccgaaag gctccaaagc agtggtcaca aataaaattt | 120 |
| ttgggaatct ttaaaaaaaa aaa | 143 |

<210> 212
 <211> 250
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(250)
 <223> n = A,T,C or G

| | |
|--|-----|
| <400> 212 | |
| aaaccttact ggaacctcac aggttatagg ctacaccttg cnaaaacccat tantatnnga | 60 |
| aagactttgt caaagntcaa gaagaaatga naggatcgt aagtnatcat agcgatgag | 120 |
| aaactctatn attttttctg agnggggggt anagcctttn cattgtccca ctcacttcca | 180 |
| aagngactat aagaagacnn ntnggagata agancncatn gaacattaac caactgtggg | 240 |
| taaagcgctt | 250 |

<210> 213
 <211> 399
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(399)
 <223> n = A,T,C or G

| | |
|---|-----|
| <400> 213 | |
| atggaccgag ccctctgcaa tacaaccgct gtttggaac ttcactttct tactgagcct | 60 |
| ggctgtctgc tacatgctcc ctgtggagtg gaacatccgc agacatttta aaggaacagc | 120 |
| tttgtgtccc accanagggt ctgaggactg aacacatgga ctcatacatc atacatgggt | 180 |
| aagctctccc atctatcacc tagcttcagg tttgtcagcc atctctccac atacacatta | 240 |
| agcatntgaa ataagacact gctgatattg gatgatagca aggttcagaa gacctggcag | 300 |
| aggatnttcg atgancttct gtcctcaagg aatcgantac aggacttcta cttgcagaaa | 360 |
| aggcaagaat ggctnattag ggaaaaagga tattcccaa | 399 |

<210> 214
 <211> 323
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(323)
 <223> n = A,T,C or G

| | |
|--|-----|
| <400> 214 | |
| atgaccgttt tgatgaanat gacaaagatg attctgnctg gntnttanac catgattatt | 60 |
| tggaaaacat gnatgggatg ntcaagangg tcantgccat anaaaggata gttgggtgggt | 120 |
| nccacacagg ccccanttnt gcacangagg ggatatccgc catcaatgaa ctcatagaaga | 180 |
| gatnetgccc caactcanta ttggtcatta tcnacngaa nccaanggac ctangacttc | 240 |
| ccaccgaanc ctacatcctc agtgnaggaa gctcatcgac tatggnacgc caacgtcaat | 300 |
| anacttttga gcatgtgact agc | 323 |

<210> 215
 <211> 416
 <212> DNA
 <213> Mus musculus

<220>

<221> misc_feature
 <222> (1)...(416)
 <223> n = A,T,C or G

<400> 215
 cccagtcacg ttaaattgtag gtggacactt gtacaccgac atcgcttacc acagttgaca 60
 cgctacccgg attctatgct tggagctatg tttgggggtg acttccccac agcccgagac 120
 cctcaaggca attacttcat tgatcgagac ggaccgctct tccgctatgt ccttaacttc 180
 ctacggactt cagaactgac actccccctg gactttaagg agtttgatct gcttcggaaa 240
 gaggctgatt tctaccagat cgaacccttg attcagtgtc tcaatgaccc caggcctctg 300
 tatectatgg atacttttga agaagtcgta nagctgtcta gcaactcgaa gctttctaaa 360
 tattccaatc cggggggcgg catcatcncc cantttaacc attcaccccc gaaagg 416

<210> 216
 <211> 317
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(317)
 <223> n = A,T,C or G

<400> 216
 gatgactgcc tgccttttnac cttggagacn gtgtacagct ggnanctgna agcctgggat 60
 gaggatctgc aggaggtcct gtcctcagat gaaattgggg gcacctatat ctcaccccca 120
 ggaaacgaag aggaagaatc aaaaaccttc actactcttg accctgogtc cctagcttgg 180
 ctgacagagg agccaggggc aacagaggtc acacgcacat cccaaagccc tcgctctcca 240
 gattccagtc agagttctat ggcccaggag gaagaggagg aagagcaagg aagaactagg 300
 aaacggtaaa cagagtg 317

<210> 217
 <211> 235
 <212> DNA
 <213> Mus musculus

<400> 217
 acacgaatag catagtcatc tggaagagaa gaaacaccag tcaactccctt cgaggagtct 60
 actgaggaag aaagagaaca ggaggaggcg gctgctctca aaatccagtc cctcttccgg 120
 ggacacgtgg ctagagaaga ggtaaagaag atgaagtcag ataagaatga gaatctgaaa 180
 gaagaggcag acaatctgag accacagggt ttacaccccc gaaacatgaa aagta 235

<210> 218
 <211> 355
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(355)
 <223> n = A,T,C or G

<400> 218
 acaacgttcg tgcggntcgg tnaggggttg tngctggcc ctatgacang gatgaatggc 60
 cagtcaacaa aagtgagcat ctttctctgt ctttcacatt cttccttcat ggagagagta 120
 accgtgtgca caagtgtgga gatagctcag caccagccga tctatttgat caacgaggac 180
 gggctgtaaa ctatgatatt gtaatcttta ccaactggga ttgcttcctc tcagagttca 240
 ccagaacttt gaatttctct ctctctctct ctttttttaa tgggctgttt ttactgcagg 300
 ggcttttctt ccctagaaac ccaactctac gcagaaaaag tgaaaaggaa aaaaa 355

<210> 219
 <211> 120
 <212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(120)

<223> n = A,T,C or G

<400> 219

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| ttggttccac | gtacgtcagn | tctgctcatt | atcantgacg | gcggnatctg | cgacgtgaca | 60 |
| cataccatag | angccatcgt | nagtgccttc | tcactgcca | tgtactatca | ttattgtcgg | 120 |

<210> 220

<211> 265

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(265)

<223> n = A,T,C or G

<400> 220

| | | | | | | |
|------------|------------|------------|-------------|------------|-------------|-----|
| gggagcagat | ggactatgga | ctacagttta | cctcctcgcg | aaagtccctc | agcatctctc | 60 |
| ctattgnact | ttacctcctg | gccagcttct | acaccaagtn | cgatgctgct | cacttcctca | 120 |
| tcaacactgc | ctcgctgctc | agcgtgctgc | tgcctnngct | accccagttc | catgggggtnc | 180 |
| gactctttgg | aatcaacaaa | tactaaanga | nggttggtcta | gttctgcagg | cattgaggga | 240 |
| aggcactgga | actaagatat | aatgt | | | | 265 |

<210> 221

<211> 375

<212> DNA

<213> Mus musculus

<400> 221

| | | | | | | |
|------------|-------------|------------|------------|------------|------------|-----|
| gactgagcct | ccttgcctgga | gagggagcac | ccccccacc | ccccagggcc | tggagcctac | 60 |
| ctgccagcat | cctgggagat | ggtaacagac | acgtccagtc | ccagtgtggt | cacccttttg | 120 |
| cacacggcgt | ccatgtcgat | gatggagtcg | atgctctcgg | gaccatcctc | cacgcagcac | 180 |
| tgagagcccg | ggcagaaccg | gcaattatcc | agtcctttgt | aacccttggt | gtgcccacat | 240 |
| ttttccagcg | tactgtggt | ggccatgccc | gacaccccaa | catgcactac | gagctgggga | 300 |
| caagagacaa | ttgggggacg | gttagcagga | gcagcaccca | cccatacatc | gtgagatgcc | 360 |
| aggacttgga | aggtg | | | | | 375 |

<210> 222

<211> 102

<212> DNA

<213> Mus musculus

<400> 222

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| acctagcaga | tgtcacacag | acgataaata | gcaaagatgg | aagtcttcat | gccggaggca | 60 |
| atcctataag | acagctgagt | tctgcagagc | tggagacaga | ct | | 102 |

<210> 223

<211> 498

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(498)

<223> n = A,T,C or G

<400> 223

| | | | | | | |
|------------|------------|-----------|------------|------------|------------|----|
| ttcctctctc | gttcaaatcc | tgtagtgca | atgatcaaan | tctgtngacc | cacatnatcc | 60 |
|------------|------------|-----------|------------|------------|------------|----|

| | | | | | | |
|------------|------------|------------|------------|------------|-------------|-----|
| gcctagtgtg | caacgaggtg | acnacactga | cggnanaccc | acctganggg | attananact | 120 |
| tccgcaatga | tgaggtatct | ncacagacct | gcaggttacc | atcgagggcc | ctgatangga | 180 |
| ctncctatgc | tggaggtctg | ttccgtatga | aagctcctac | tggggaagga | ctnccttgcc | 240 |
| ccccaccca | agggctactt | cctgactaaa | anattccacc | caantgggtg | gcccccaatt | 300 |
| ggccgagatc | ntgntgncca | natgtgcttc | aannnagngg | acctgngann | ggnnctgnaa | 360 |
| tctggggctt | taccnaatat | agtagcctng | gttgcnccaa | tnaaangngn | ccttgggtctg | 420 |
| gatnccacc | ccttaaacc | cannaanttc | tggnannttc | aattagaaan | gaagggcaaa | 480 |
| ggcccgccct | ttgccttt | | | | | 498 |

<210> 224
 <211> 502
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(502)
 <223> n = A,T,C or G

| | | | | | | |
|------------|------------|------------|------------|------------|-------------|-----|
| <400> 224 | | | | | | |
| agactgagaa | tgctcgtgat | tctgtccct | tggattgtaa | ggtttatgta | ggtaatcttg | 60 |
| gaaataatgg | aaacaagact | gaattagaac | gggcttttgg | ctattatgga | ccactcagaa | 120 |
| gtgtgtgggt | tgctcgaaac | cctcctggct | ttgctttcgt | cgaatttgag | gatccccgag | 180 |
| atgctgctga | tgctgtccgg | gaactagatg | gaagaacact | gtgtggctgc | cgtgtaagag | 240 |
| tggaactgtc | gaatggtgaa | aagagaagtc | ggaatcgtgg | gccgcctccc | tcttgggggtc | 300 |
| gtcgtcctcg | agatgattac | cgcaggagga | gtcctccacc | tcggcgcaga | tccccaaagaa | 360 |
| ggagaagctt | ttcccgaagc | cggagcaggt | cactttctag | agataggaga | aaaaaaaggt | 420 |
| ctcttgtctc | gtgagagaaa | tcacaagccc | gctcgatcct | tctcttaggc | tcgnaacccta | 480 |
| tctanggcc | atgaaaggga | at | | | | 502 |

<210> 225
 <211> 556
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(556)
 <223> n = A,T,C or G

| | | | | | | |
|------------|-------------|-------------|------------|------------|------------|-----|
| <400> 225 | | | | | | |
| tgccgctgtt | cctcctgctg | agagccctga | gctattcnan | agatgacact | gnntgcngct | 60 |
| gtnggaccnc | cgcagccacn | ctctnnccgg | tcggcnctcc | ctccttggac | ngnnattnta | 120 |
| tgaataaaca | tcnnaaccag | tactatcagg | ccagcgggtc | aaaacccgga | aaagggatga | 180 |
| agaaaagaat | ttcnaacccta | cncctttncag | ggatacactt | gtccaggggc | ttantnaacc | 240 |
| tggtgataac | cttgaanctg | tagccaaatt | tttggattct | actggctcac | nattagatta | 300 |
| ccgtcgctat | gcaaacacac | tctttgatat | cctgggtggc | ggcagtatgc | ttgcccctgg | 360 |
| aggaacacnc | ntnnacaatg | gtgacnagga | ccaagatgac | canccactgt | gtgttttcag | 420 |
| caaataaaaa | tcataaaacc | atccgaaact | atgctcaggt | cttcaataaa | ctcatcaggg | 480 |
| agatacaatt | tatttggaat | aggcatttga | anatgaaatg | aaaaaacttc | tcctcttcct | 540 |
| taaagcattt | tctgaa | | | | | 556 |

<210> 226
 <211> 198
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(198)
 <223> n = A,T,C or G

<400> 226

| | | | | | | |
|------------|-------------|------------|------------|------------|------------|-----|
| aacgacgaaa | catcancaga | actttattga | gantggattc | tgagactann | catgacactg | 60 |
| angaggcaen | gcaagtgact | cctncaatga | cnagntccan | gagatccatn | ngcaanaatc | 120 |
| tatgggnggg | ccggggggccc | cagtcenntt | catgcaggat | ntatctgcga | ctttcagaan | 180 |
| ntggggaggc | tgacattg | | | | | 198 |

<210> 227
 <211> 446
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(446)
 <223> n = A,T,C or G

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| <400> 227 | | | | | | |
| agtctgagct | ttgacgactt | cctggacctt | ctgagtcggt | ttcanngaca | naggaacccc | 60 |
| nnacatgang | ccncactatg | ncttncgnat | cttngactnn | tnngacnatg | gaccnttgga | 120 |
| cagagaagac | ctgagccntc | ttgagaatct | gcctcacagg | agagagggcg | aggacactng | 180 |
| gctaanacgc | ttctgagatg | aacccagntg | attagacaat | nncctggaag | agtaanacat | 240 |
| ctgacagggg | tgggaccatc | tatnttncg | aggtccaaca | tgtgatctcg | cgctcaccag | 300 |
| actttgccag | ntnctttaag | atngtntctg | gatgtctttn | aagnccaac | atgcctggcc | 360 |
| aaggacctgg | ccactgctga | gatgtggcca | aggttatgcc | tgcggtgnca | ggncnctg | 420 |
| cggcccagnc | tgagagggc | gctgga | | | | 446 |

<210> 228
 <211> 354
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(354)
 <223> n = A,T,C or G

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| <400> 228 | | | | | | |
| ccccactgtt | tcagggatgt | acacgatcgg | agacattgtc | cacagttggn | gagtgcactg | 60 |
| cccctgagca | ggactgtgcg | atnnactgtg | ctcanggtcc | ccaaggctgc | tgggcnanga | 120 |
| agncgnntca | gaantnctaa | ggggactctg | gccaatgnnc | tagancaant | naagttnttt | 180 |
| tccaacgtnt | aaaaacacat | anaanaccnc | cagcctatgn | cccncttctg | ctcccggatc | 240 |
| acgtcctgtc | ggtaacatta | gccacagtcc | aaagatggca | cagccaagga | tggagccaag | 300 |
| tctccacacc | aaaatctatg | atggcccacg | tctgactcaa | gttaaaaaaa | aaaa | 354 |

<210> 229
 <211> 186
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(186)
 <223> n = A,T,C or G

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| <400> 229 | | | | | | |
| gttgccagtg | ttgctgattg | ngatacaaga | tnгнаaggag | ccngggtnnt | ncattggana | 60 |
| ggctcttctc | cctggagcat | cccggcttct | atcttacaag | atgcttgnat | acagncttct | 120 |
| gataaagatc | tggaacgcct | ttcnggntgc | tntataggag | ggaanttctg | ttatattgga | 180 |
| gaacac | | | | | | 186 |

<210> 230
 <211> 665
 <212> DNA
 <213> Mus musculus

```

<220>
<221> misc_feature
<222> (1)...(665)
<223> n = A,T,C or G

<400> 230
agcaagctgc acatggaagg gttccgaagc ctcaaggagg gtgaggcggg ggagttcacc      60
tttaagaagt ctgccaaggg tctggaatcc atccgtgtca ctggccctgg tgggtgtgttc      120
tgtattggaa gtgagcggcg gccaaagggg aagaacatgc agaagcgaag atccaaagga      180
gacaggtgct acaactgcgg tgggctagac catcatgcca aggaatgcaa gctgccaccc      240
cagcccaaga agtgccactt ttgccaagc atcaaccata tgggtggcctc gtgtccactg      300
aaggcccagc agggcccag ttctcagga aagcctgnct acttccngna ggaataggaa      360
gagatccaca gccntgncct gctccnagaa ncccagaatt gangcccagg agtcagggtt      420
attctttgct natggggagt ttaangaaag aggcataaat ctgnacagtg ntnaangtgt      480
nngtaanggt nggntttgcn tggnttancn ttngnctgnc gagnctnnnn gccggncttc      540
ccaacgtcat cctgctttcc ttnaagntan tgaaaggatt aggcnaatgg aactctaccc      600
nactnttnnc tgaagcnagc gaagcttttn tgngggagga accncccttg aacccccgagg      660
ctttt                                         665

```

```

<210> 231
<211> 105
<212> DNA
<213> Mus musculus

```

```

<220>
<221> misc_feature
<222> (1)...(105)
<223> n = A,T,C or G

<400> 231
tagtctggaa ccacgccgng ggaggatcta cagaaatatt gctggcgcag acacatttcc      60
agttgtctga ggtggccagg acattactcc cgtgcgcctt accca                      105

```

```

<210> 232
<211> 199
<212> DNA
<213> Mus musculus

```

```

<220>
<221> misc_feature
<222> (1)...(199)
<223> n = A,T,C or G

<400> 232
accatttttg atttttgtac ccatataaag tctctgaaac tcaagtcaag gaatcttctg      60
aagacaaaaca acagttttcc tccaactgga ccatgtaatt taaagctgaa cggcagtcag      120
caagtactgg ttgancacag ttatgccttt aggaacccta tggaggcgaa aaaaaggata      180
attaaactag aaaaggaaa                                         199

```

```

<210> 233
<211> 530
<212> DNA
<213> Mus musculus

```

```

<220>
<221> misc_feature
<222> (1)...(530)
<223> n = A,T,C or G

<400> 233
ggatcatgaa gtgatataca gtcattttca gggaccatta nagggtncta tagaaccagc      60
tactccaact gaagtcgtca gcaatggggc acctctncag cctgnccctg ctgaactggc      120
caatagccaa gngggagcac atgttcagcc tgcccctgnt gaagtgggtca gcagccaana      180

```

| | | | | | | |
|-------------|------------|-------------|------------|------------|------------|-----|
| tggactgnnc | actctacagc | ctctgncacc | agcatncatt | gatttgacgg | aggaagtaca | 240 |
| gccctcagaa | gaaaatatgg | aggttgtcaa | tcctggaact | tcagaggagc | ctagtcaggg | 300 |
| atctgggtgct | aacccaaccg | ccggagctgc | tagatccgtt | tcaatgaaca | acttcatcag | 360 |
| cnggctgcag | aggcttcata | acatgctgga | attgctgana | cctccacctg | cagaccacag | 420 |
| tgtggggcca | ntaanancaa | ggaggaggat | ggcacccatt | ttgagggcca | gagctggaga | 480 |
| gtctcanagg | caagacaatg | gcaggatatgt | gccacataca | ccactatatg | | 530 |

<210> 234
 <211> 281
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(281)
 <223> n = A,T,C or G

| | |
|------------|-------------|
| <400> 234 | |
| gaactgagag | aagaaganaa |
| caaaggacca | gtgttcaaag |
| caaaagttaa | tttgaggagaa |
| agaaaacttt | acagaataga |
| ccaaactccc | cagctccccc |
| | tnttcaagta |
| | gactcaaaaa |
| | a |
| | 60 |
| | 120 |
| | 180 |
| | 240 |
| | 281 |

<210> 235
 <211> 353
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(353)
 <223> n = A,T,C or G

| | |
|------------|------------|
| <400> 235 | |
| tgagtttgtg | agggactgca |
| cccattgaag | accatgaagg |
| ctggaagtgt | tgatgctaaa |
| ngatgactct | ncgacattgg |
| gtgtgtggat | catggtaaac |
| actngtcatt | gcactctttt |
| | gttgacnccc |
| | agnctttgct |
| | gtattacatt |
| | aaa |
| | 60 |
| | 120 |
| | 180 |
| | 240 |
| | 300 |
| | 353 |

<210> 236
 <211> 448
 <212> DNA
 <213> Mus musculus

| | |
|------------|------------|
| <400> 236 | |
| gactgagaga | tgttatgaac |
| cctttccaat | cccaaatttg |
| tgaactgttt | gggaaaaaag |
| acttaaagag | tcatgtgtgt |
| atgatgaagc | cattaagtgc |
| tcttaagaga | tctttcctta |
| caagatacca | gttgcttcag |
| ttgcttacca | tttattagaa |
| | gactatga |
| | 60 |
| | 120 |
| | 180 |
| | 240 |
| | 300 |
| | 360 |
| | 420 |
| | 448 |

<210> 237
 <211> 227
 <212> DNA
 <213> Mus musculus

<220>

<221> misc_feature
 <222> (1)...(227)
 <223> n = A,T,C or G

<400> 237
 gaggcctcag cagttctacc tgtcatcana tcaggagcat cagtgttgct gccgcgttga 60
 atgagnatgg ctgcaaagct attctcatca aatgatgtcc cattcaccac agggaggtct 120
 tcaaaggggt ttacagactg gtctgaagac acagtgatgt actggacggc cagccagagt 180
 gcagtgtctgc cttcgtgatn tttcagctct aaatctaata tgaaata 227

<210> 238
 <211> 539
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(539)
 <223> n = A,T,C or G

<400> 238
 gaaagaagct gacgacagaa gggctgagga cctgggcacn accacttacc gaccacttcg 60
 tngnctggct gaaagancgt taccttcctg ccaactaaag agcagaaata gtctacagat 120
 aaggaaaact gaagtaaaat ggcctcataa tcaatncatc ctttggtacc aagatatgta 180
 cacacggaca gctctcagac ggaatcctag ctgcatagag tgctcatcct gccaaatnag 240
 cccaggtctt gctcactagt gattccacac actagcaatt ccacatggta ggtcatcatt 300
 gcccttnttg aactcaagtg caagtgtgag tgtgagctca cctggctatg ccatgtatct 360
 tactcataaa cctcttccca tcgccctgag gccaaactgt tatcaacctc tgctgacttc 420
 ctttcctcac tattgcttcc gtcggtcagt cctcttctct tcatcaactgt ttagcttatg 480
 gactttgntg nngggagccg cgccacatt tcgncgntac aagatggcgc tgacagctg 539

<210> 239
 <211> 135
 <212> DNA
 <213> Mus musculus

<400> 239
 gactgagagg cttctcgaga gacgaatgct gttctgtgcc tgatgaaagg cttgaaactg 60
 acgagcggaa aagaaatttg ttctattcct aaatggggac aaataaatga taaatatctt 120
 ttctaaaaaa aaaaa 135

<210> 240
 <211> 486
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(486)
 <223> n = A,T,C or G

<400> 240
 caggtaggcc tgccaaacgt atangtganc cccctgtncn natgatgggn ttcctgngag 60
 ggagagnccg gtgaccgaca tgcctantga gcctggcact natggtgctg aatcccggnc 120
 tggntgcctg nggatcagca gacaattggg gccgtgggcg agtctctggt acgcctcatt 180
 aacgaccgag gagacggaga agggtagcga ttatggttta gggctagatg cagccgtang 240
 ggccaccgta taccaggtca gaagccaaac gaaangtcaa acaccagcg ggcaagctcg 300
 cgacgcgcct cagcaacgac accgccaagn tctcgtggga ggagcgcgac tggcggcact 360
 ctcgcggaaa gtggaagctc ccgcaagcag gcggggggcg tgaccgnaag aaggtgtatt 420
 tcaaagtggg taatagatgg ttttctcacc caataaaant gcaatttatc ctcctaaaaa 480
 aaaaaa 486

<210> 241


```

<211> 154
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(154)
<223> n = A,T,C or G

<400> 241
tgatttaccc actgaggacc cttagatcct gtggatacct ganaattgat tcatctgtnt      60
gtagctgagg cttggcacct gcaagctttn cctctcctgg catttcacca agcccccgag      120
ctcacagggc tctggctccc ctgaagtcct ggg      154

<210> 242
<211> 375
<212> DNA
<213> Mus musculus

<400> 242
agaagtgttt ctattttgag tgtcgaacac aacactcgaa agcgggtcac aagcaggagc      60
cgggattagg gtttagtttt ggtatgtgtc cctccctttg acttgaagggt ctgcctgggc      120
tgtgtctgta acatgatgtc tgttgatgag tggagcagac acctgccac agttggctcc      180
tggtaaactcc cgtctgctgg actgcgttgc cttcttccgt atgctctccc gaaaactgcg      240
ttgccttctt ctgtatgtc tcccgaacac tcaagtgttc tcaggcggcc tctatgggtg      300
cctttctctt ctttcccaaa tggtagccca aataaatgaa tatatatgaa tcgttttcaa      360
cctacaaaaa aaaaa      375

<210> 243
<211> 153
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(153)
<223> n = A,T,C or G

<400> 243
gcctctggga tctcttcctc cttcnngnag cggactgacc acagcaggat cttcttctca      60
aaatctgtgg gcttgtgcag cnggcacccc gtgtctgtna gactctgtgg ggaaaacagg      120
aatctggctt gagactttaa tgctcaaatc aag      153

<210> 244
<211> 239
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(239)
<223> n = A,T,C or G

<400> 244
aaaatgccat aagtcctgtg ccatnaagaa tatgctngac ctncctttgag aaaaccaacg      60
agatgcgttc tgaacttcaa caatcatgtc catgngtgct ggctgcaaca gatgagttag      120
cggctttcat ncaccagtac ccgcaccttg gnggnntgaa acnnngatct ggacagcatt      180
ttncaaagga tcaagacact nnaggggaaa ctaatnccag ncagcactcc ataggcctt      239

<210> 245
<211> 174
<212> DNA
<213> Mus musculus

```

```

<220>
<221> misc_feature
<222> (1)...(174)
<223> n = A,T,C or G

<400> 245
gaaaagattg aggaagtgtt tcacgtggaa ccccaactac agagactctt ttataggggc      60
aaacagatgg aggatggcca cacactcttc gattatgatg tgcagcctca atgacacaat      120
ccagctgctc gtgcgcnggg nggntggcac tgccctctcag tacaaaaaaa caaa          174

<210> 246
<211> 245
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(245)
<223> n = A,T,C or G

<400> 246
cccgaacctg ccaatnctac tttggcttca gtggatggtc gaaaaggatc atcaagggca      60
gtcctcgttt cttatgaaga ggaagacagc tcacaagctt gncttccaag gcgggctgta      120
ntcagatgcc ttccagatgc gtgaccantc ngnggntctg gaaagtggna ggntcgcggt      180
ggagtacagg cccacgggng angatntana tgccagaaaag naaagaagag ctgcgagaat      240
ttaat                                          245

<210> 247
<211> 176
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(176)
<223> n = A,T,C or G

<400> 247
tgcccactca ctccattctc annacctctc ttcctcatgn nnatgaatca ggatggnaag      60
ttctnagnct acatgctcta gcatcatacc tgnctgncag atgccgngct ccctgncatg      120
atgntcntga actcaccctt taaaactgna agccctcnat aaagcctttc ttctac          176

<210> 248
<211> 399
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(399)
<223> n = A,T,C or G

<400> 248
cttgtctctg tgtagtagcc caaatcctaa tctccagtga aaccctccac atgcatgata      60
ttgggtctcca gcagctctgg acactgcccg tcaccgacac ctacctgatg tcaggactgt      120
cccgactctg gggaggtatg acatctttac gtggaagtca gttcccaaag gaactattca      180
gaagctagct cactgaagga gaccaagaac aagctggagt tgatccccctc actctgggta      240
aggtgcacct tggtttggtg cactcacatg gtgttcacag ccattttacaa ctccagttnc      300
aaaggatcta acaccctttt ctgacctctc tggncatcag gcatgcatgt ggtgcacaga      360
cttacatgta ggcaagacac ataaaataaa aatgaagag                                     399

<210> 249
<211> 127

```

<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(127)
<223> n = A,T,C or G

<400> 249
ccatccatga aagctctgag acagagactg ggtccangag tacattagca gccgnatngt 60
ntggangngg tcaganggtg tgntatattg aaggtnttcg ganntattat atctaggggg 120
ggggaga 127

<210> 250
<211> 411
<212> DNA
<213> Mus musculus

<400> 250
gatgctgact gcaggggatgg aggaactttt tccactgcag aagaacaatg tgggtgcctat 60
gggaacatgc catgtgacca ttctccattc ctcccagcaa ggcacgctgg gtgatgtgaa 120
gaaccagga aggaaagctg gaggagagca tgggtgggtgg cagagcgagg tttgggggaaag 180
ccctgagccc tgctccatct gaccctcagt acatctgtct ccgtcactgt ctacctgccc 240
tgctcacgcg tgccccctcac tcaccccacg gcaacaggcc tatctttccc ccaacatcaa 300
aagagctatt tcagcgactg tcgctgtacc tggcccatag cctctagtct atatatgtct 360
gtcaaatagaa ttggctataa acatgaaaag gtttctcctg aaaaaaaaaa a 411

<210> 251
<211> 144
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(144)
<223> n = A,T,C or G

<400> 251
catatgagag cggagccttg cangnacctg gattcagang aataccacnn ccgctatggg 60
tctngnctg tattgggctg antacctgcc agnatccaca gaggtgggtg tgnccaccaca 120
gcaggaccca aaagacatgt attg 144

<210> 252
<211> 244
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(244)
<223> n = A,T,C or G

<400> 252
catggcggca tacaancatg tgggtancgag atctgacgcc ctcttggtgga gngtctgaag 60
tcaactacng ttgtacttat gtataatant naatnnttct tttnnanaaa gttgacaaag 120
aactnctana gcagcctcgg ccatncacag acagnctcgc gtttttctcc tactntgtgc 180
ttatgctntt aaatggcaga ctcgacgggg cngnggtggc ngcacgcctt ttaatccctg 240
cact 244

<210> 253
<211> 211
<212> DNA
<213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(211)
 <223> n = A,T,C or G

<400> 253
 gaactgagat gacaacctga gaaagctaata tttaaaaaat gatgccgggt agcaagcata 60
 atagtaacag aattgtgctg ttttctggta tccccacccc catttgaacg gcgtgttctc 120
 gatgtcgcta caagtttgtt caaatgacag atgnaactna aaangctgtt actgctattg 180
 atgaataaca tactactctc aaaaaaaaaa a 211

<210> 254
 <211> 216
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(216)
 <223> n = A,T,C or G

<400> 254
 caccctcaac cactgggtgat aagccngntg tgttncncc atctcaagac ttgctctgca 60
 atgtcggaca cctcggccaa gccttgatta tcaaggagag actggaagat aaacagaggt 120
 caaaaagccc acttgattag ggagtgagga tctggtacca ctgcagctgg tgaggagaga 180
 gagcaagaga tggaaaaang ggagcttacc taagaa 216

<210> 255
 <211> 278
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(278)
 <223> n = A,T,C or G

<400> 255
 aagacttgct ggacgtggag gaaattgtca gcgtccgtgg ctncagcctg gaggagaagc 60
 tacgtagcca gttataccag ggggacttcg tgcattgctat ggaaggcaaa gattttaact 120
 atgagtaccg tacagagaga agctntcagg gtccccctgg tttttcggga caaggatgga 180
 ctagggatca agatgccaga cntgatttc acagtccgag acgtcaaact cctggtgggt 240
 aagtgccaa ggccgggtag gagaagggaa gggaggct 278

<210> 256
 <211> 178
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(178)
 <223> n = A,T,C or G

<400> 256
 cactggacac gagctcgcat aatcagaaag gctttatcca gaggacttct aactgatga 60
 tgatgaagga atgttatcag acatgggccc agcctggagc ngtgaagccg gaaccagtt 120
 acacagattn agncctnatg anagtccagg tcngaaaaga gttcccgtgc cttacgt 178

<210> 257
 <211> 270
 <212> DNA
 <213> Mus musculus

```

<220>
<221> misc_feature
<222> (1)...(270)
<223> n = A,T,C or G

<400> 257
cggccaccg tgcgcccag actgaanaag actgncanaa actatgacca atcanngagc      60
agcatcaacg gacatctatc caatnggnac gtgctaggnc ggtacctacn gaacaagacg      120
gncggnc tca cctgtnttnc tacggtggga ttgagaggta nccgcatagt gcgacactag      180
aacnanncaa aaggncgcag cacaagttac gccactacg ggggtgtatgn tgggaaagg      240
cgctgcgca gaggtgctct cctggatctg      270

<210> 258
<211> 261
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(261)
<223> n = A,T,C or G

<400> 258
aatccggtac gaattttttag ggctcatggc cggccggcc gttcatcatc ttgaggcagg      60
ttccacgaga ggtttgacct cgactccaac tataggaaaa acaacgactc caaacgccgt      120
gaccgagcta cgtctctnct ccgcgctcta ggctgaaggg cattccgacc tgtcatnta      180
ggagacatnn aaacctatg ctgcctcaaa ctcaaacttg cagcaatcct cctgccttca      240
gcttcccccc acccaccgtg c      261

<210> 259
<211> 407
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(407)
<223> n = A,T,C or G

<400> 259
ctgcggtggc acctggggcc tggcngtctn tacntattgt ggaacnatnn ctgngcaggc      60
nntncngngt acataacctg ngtnaattcc aatgcgcatg cngcagggtg tctggaggc      120
ctatggcggg atgctngaag gagccgtaca gcatngagca nngcnagngc cnttcggngt      180
acctatngga ncatggagct ggccattcct cactgggagc cctgagaccn ccatgtangc      240
ancnncaatg gtctctacct gcggggcggg ggagaaatna ggacnagctt tgccctgcgtt      300
ggancnnaca gnataanagc agngctntgt gccattcggg ctacctctcg ggcattggagc      360
tgnccattcc tcactgggag ccctgatacc accatgtaag catcacc      407

<210> 260
<211> 196
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(196)
<223> n = A,T,C or G

<400> 260
gggttacggc catatggaca nctcaagcgc ctgctagaag cagccagttc tgggtgaggcc      60
acaggggact cagcatcctg acaacagcag ttcacctttc caaaagggaa ggtaactctg      120
aagccgccat tcacatccgg acccaggtg ctccctttccc ttacaacgga gccactttcc      180
cctccaaaaa aaaaaa      196

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<210> 261
 <211> 268
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(268)
 <223> n = A,T,C or G

| | | | | | | | |
|------------|------------|------------|------------|------------|------------|--|-----|
| <400> 261 | | | | | | | |
| actgagccca | ggagactcat | tggaggaagg | tgtatatcca | agagcaaatt | gaccagaagg | | 60 |
| actcttccat | tactgaagct | ggncatggna | ctcatcagga | gtgcaggttc | tttgtgaatc | | 120 |
| acccacgctc | caggtgagat | ttttaatttg | tatagttagc | tataaactgc | ccaagggact | | 180 |
| tcctggtgat | gtaactgcct | ttgagtcacc | cgtgtacct | taagtggcct | caataaannc | | 240 |
| aatggttcac | caagctgaaa | aaaaaaaa | | | | | 268 |

<210> 262
 <211> 324
 <212> DNA
 <213> Mus musculus

| | | | | | | | |
|------------|------------|------------|------------|------------|-------------|--|-----|
| <400> 262 | | | | | | | |
| cttctcacc | atgaagggag | ggcatgtggg | gcaggaacca | gagacctcct | gcagggtcaag | | 60 |
| tgcagacaca | gagcaggtca | acttctcag | ccacctcag | cacctagaga | agccctagct | | 120 |
| ccatgcagga | cgaagagcct | aactccccac | ctcatgcctg | tcaccaagac | tggcctcttc | | 180 |
| tctgtccttc | cacctcttta | tgcaaggcag | tgggtgtctg | tcagccctgg | gcgtactctg | | 240 |
| tcctcacagg | ccctgcactt | tagggccctg | gtgtcatgac | ctgtggaaga | agaaggttgt | | 300 |
| agttggtagt | ttccagattc | ctgc | | | | | 324 |

<210> 263
 <211> 298
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(298)
 <223> n = A,T,C or G

| | | | | | | | |
|-------------|-------------|-------------|-------------|------------|------------|--|-----|
| <400> 263 | | | | | | | |
| tgagggtatta | tggctnaggt | ctgtctgttc | ctganccggt | ggaaaactgc | cgaantttgn | | 60 |
| natcngtgna | gcggnagtgg | caggnccttgn | tatgngctta | nccaactgtn | tgntgagaag | | 120 |
| ggacatgtca | ccggaatana | catgactgan | gtccagggtcc | aagngtctaa | aacctatntt | | 180 |
| gaacaccaca | tggaaaaatt | tnggtttcca | ggcacccaat | gtgacttttt | ctccacggnc | | 240 |
| gcacgcagaa | gttgnccagan | gctgggatcc | agagngagag | ctatgatatt | gtcatgtg | | 298 |

<210> 264
 <211> 215
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(215)
 <223> n = A,T,C or G

| | | | | | | | |
|------------|------------|-------------|------------|------------|------------|--|-----|
| <400> 264 | | | | | | | |
| actgcccttt | gagaataaaa | tgggaggcca | caaccaaagt | cttttgata | aagcaccaca | | 60 |
| atggacaatg | naaggnagnc | tgcttactc | tnactncttn | nnaaggcaca | ganctttgcc | | 120 |
| attatggtaa | agancctcan | ttctaactctg | tttctctctg | ctctccttc | cgagggacag | | 180 |
| aatctttacc | agnntnggaa | agacctccct | aactc | | | | 215 |

<210> 265
 <211> 287
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)..(287)
 <223> n = A,T,C or G

<400> 265
 gctcgcattc aactgtgatg agcccatgta tgtcaagctg gnggnggcac tttntgctga 60
 gcaccngatc aacctgatac aagggtgatg acagacannt aaactaccgt gaatgggnag 120
 gcctctgtac antctnatcg angagggcnn accacaggca angtggttgn ttgcnngtng 180
 ccntanttg ttaangacta tggcanngan tttcaggcca nggatgtcat acgaggaata 240
 ctncaagtgc nggaaataaa taaatttttg gctgaaaaag agaaaaa 287

<210> 266
 <211> 170
 <212> DNA
 <213> Mus musculus

<400> 266
 gactgagttc ctgcgtgagc agtgctggat ggcggcttca tctacttgat catgctgcgg 60
 cgcttcaagc agaaagccca cctgacttac aatggcaaca gtggcaacag ctcagaacct 120
 ggagagacac cgaccttga gctgggtgac cagacttcca aaaaaaaaaa 170

<210> 267
 <211> 258
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)..(258)
 <223> n = A,T,C or G

<400> 267
 gactgagacg ttcctctgct ggagactggt gagcttcagg gacatgccat caaggaacta 60
 aagggagcat taagagacta tgaaatgaan gggcttgtn ctagaggcat gaccgnaaac 120
 tcctgctgna nnaggccaga gactttcgtg gttntgtgaa aggaaactaa ntttaatnaa 180
 atnttgagnc gnctnnctt cttgnaacat cctgattagc ggcttgtagc tactggcaat 240
 accggaaact cctgctga 258

<210> 268
 <211> 337
 <212> DNA
 <213> Mus musculus

<400> 268
 aactgaggca aacctgtacc tgggactgct ggtcatgtgt ggctttgtcc tctttgatac 60
 tcagctcatt attgagaagg ctgaacacgg agataaggat tacatctggc actgcgttga 120
 cctcttccta gatttcgtta ccctcttcag gaagctcatg ttgatcctgg ccttcaatga 180
 gaaggacaag aagaaagaaa agaagtgacc aactggcgt cagcctttcc cagctcacct 240
 tctccccccc accccccccac ccctgtttct ttgcacacat cacagggtgtc gtgttctatg 300
 ataataaag catcaggaaa gcttttgtac ttaaaaag 337

<210> 269
 <211> 150
 <212> DNA
 <213> Mus musculus

<220>

```

<221> misc_feature
<222> (1)...(150)
<223> n = A,T,C or G

<400> 269
ggagaacttt ctacatttag agctgtgcaa cagagaggag caggctgtac tcctgagagg      60
tagtgagctg ataanaagat tccagacctg tggaaacctg gatgtgaata gtatgatggc      120
agaaattttt gattaaaaag tcattgtata                                     150

<210> 270
<211> 119
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(119)
<223> n = A,T,C or G

<400> 270
cacctttgaa ccctacggct gntttgnaca tnttntgnat actaggtntg cccnctganc      60
ttgggcctcc tctttttctc ttaagtcttg ctttctttcc ttntctctgcg aaatgagtt      119

<210> 271
<211> 525
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(525)
<223> n = A,T,C or G

<400> 271
tgagatttga aggatgcacc ntctggccaa ggacagcctt cttttcggaa gactcccgat      60
tcaaagtggc gacagacggc accatcacag tgaagcggca tctaaagctc cacaagctgg      120
agaccagttt cctcgctcgc gcccgggact ccagtcatag ggagctgtct accaaagtga      180
cgctgaagtc catggggcac caccatcacc ggaccatca accgctgacc ccctctccaa      240
catggttctg accttcagt ccaaagaaga tgcaattgcc ttgacagaaa aaaaacggat      300
ggagctatga tgtggaagag aagaaggttc cgaaacccaa gtccaagtct tatggtgcaa      360
acttttcttg gaacaaaaga acaagagtgt ctacaaaata ggttggagct ggctacatct      420
ctgcttgact gtgactgaag tgtcagctgt gcactattta tagtccatgg ataatgcacc      480
tcttaatctc ctaataaatg tgacctttaa actacaaaaa aaaaaa                    525

<210> 272
<211> 278
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(278)
<223> n = A,T,C or G

<400> 272
aagacagcag acccttgaag gacatgtcat tgcaccttta cgctctgnga tgaccngnca      60
tactntccct tgccctgntt ttcgagtcgn tggaaaccna gnnaganaan tctatncong      120
agnaagagga taatgcanc ccacgggtgt agtgctatnn atagattnta catcatanng      180
aaatatacta ctgcatagct acgacgttac ctanagcata cccatgacca ttaacacctg      240
ttnatgngga cactccagng ntattatcaa ctgccatt                                278

<210> 273
<211> 297

```


<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(297)
<223> n = A,T,C or G

<400> 273
gaactgaggc cctttgattg aatttaaaca gtctnctaga ttgattctgc ctcccaacaa 60
gaacaaactg aggaagtgat gagccacgta gccgntnacc cttanagtnt tagatgnngen 120
gatcccttca tgtatacttt acagaaaacc agttaaccgg ggccgtggng gccncncncc 180
nttttgnccc acccnnntgg aggcaaaggc aagccggntt ntttcaaagg gggggggccc 240
ctggttccac aaagggggtt cccaggaaac cccccggggn tttaaaaaaa aaccctt 297

<210> 274
<211> 139
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(139)
<223> n = A,T,C or G

<400> 274
acaacttaat cacatgtncg cccgccnctc accaaacctg nattgatttt nangntggag 60
caagaggaag agccttgntg tggagnngag aganntgctg aggagaccct gnccagctcn 120
tgcttactga cctgcttga 139

<210> 275
<211> 385
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(385)
<223> n = A,T,C or G

<400> 275
actgagggtg gagagcacac ctgtacacct gggcacctgg gctcctggac acctggacac 60
ctggacacct ggacacctgg acacctggac acctggacac ctatacaaac tccatacata 120
cacatatacc acagacagat gtgcaaaggg ttatgcacag tgacctggtt agttttaact 180
gtcaacttga cacagcctag agtcaactgg agagttgcct agctttnnca gagngactca 240
cngatgtctg gctngntatt caagtctcat gacacattaa ggagctttca aacagctgta 300
gncgtgnacc taangaantg gtgggnaatg ctgannagct gaagtaattg aatcagagta 360
nnnatattta tcccttgag actcc 385

<210> 276
<211> 288
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(288)
<223> n = A,T,C or G

<400> 276
acaatggatc acgttagaca acatgaatga ncaaaaaatg aatgaacaaa tgaagaaaac 60
ggcaaagaca agtggccaga aagggccggg cggaagagcc ctcgacagac tgaccctaaa 120
gcaagacgag gcaaggccag tccagaatac cagagtggaa gctccccgtg tancatacac 180

| | | | | | | |
|------------|------------|-------------|------------|------------|------------|-----|
| catgcgggat | gaaagtgaga | ttagccccga | gactgaggaa | gatggnttcc | ctgacggata | 240 |
| cctagagtgc | atcatacgag | ttaaattgtga | atagttacaa | aaaaaaaa | | 288 |

<210> 277
 <211> 180
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(180)
 <223> n = A,T,C or G

| | | | | | | |
|------------|-------------|------------|------------|------------|-------------|-----|
| <400> 277 | | | | | | |
| gctgggacca | gtgccaggca | tgccctcaac | tccagcccag | acctggcaga | ccacattcgc | 60 |
| tccatacatg | tcgatgggtca | gcgtggaggg | gttggttttg | ccattctttt | tcactctttg | 120 |
| nttggttggt | tgattgnatt | atttataatt | gcaaatagga | ttttttttct | tcattgagaaa | 180 |

<210> 278
 <211> 277
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(277)
 <223> n = A,T,C or G

| | | | | | | |
|------------|------------|------------|------------|------------|-------------|-----|
| <400> 278 | | | | | | |
| ggcaaaggcc | aagccgaggc | aggagtggac | ttcactcacc | cacaggcaca | gccaggcatg | 60 |
| atgatctgga | tgcccngtga | agangtgcac | gctctnnggt | ctttanctgg | tggggggaagc | 120 |
| cagggtcagc | gtntgccctt | nttctnacac | cccttncccc | accctagnnt | gacacgncac | 180 |
| caaagcttaa | taccctnctt | tacananggc | acatnccggg | gtngtacttt | gggtngcntt | 240 |
| gaacaggagc | caanatnngg | ntcaaaaaag | cttggtat | | | 277 |

<210> 279
 <211> 483
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(483)
 <223> n = A,T,C or G

| | | | | | | |
|------------|-------------|------------|------------|------------|-------------|-----|
| <400> 279 | | | | | | |
| ggagagacat | gtggacacgt | agcccctatg | gcttctgcct | gccagatcct | ccgctggggcc | 60 |
| cttgccctgg | ggctgggcct | cacattcaag | gtcacgcatg | ccttcagatc | tcaagatgag | 120 |
| ctcctgtcca | gtttggagag | ctatgagatt | gccttnccaa | ctngagtggg | ccacaacggg | 180 |
| gcaatgctgg | ccttctctcc | acctgccttc | cggaggcagn | gtcggngtgc | aggggctaca | 240 |
| actgagtccc | gnctatttcta | caaggtggcc | gcacccaagc | actcacttcc | tgctgaacct | 300 |
| gaccccgcan | ccccccgtct | cctggcaggg | cacgtctcgg | gaggaatact | gggacacggg | 360 |
| aaggcctggc | ttggcagaag | gctgcccggg | cccactgnct | atacgtggc | caccttgacg | 420 |
| ggccaggctg | ggaagctccc | atgtggccgn | cnagcancct | gtggggggcc | tggtgagctg | 480 |
| aag | | | | | | 483 |

<210> 280
 <211> 241
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature

<222> (1)...(241)
 <223> n = A,T,C or G

<400> 280
 tgcccaccag taatggaact caccnaagna tacagnncgt cctctcttgn tcatggccan 60
 gnnngaagan ccaaggncaa gcctgcatgn canatgccgg tgttgcnnaa accnancngt 120
 gcctngagga ntgtcctacg ngcatnangc tgagagcaaa gagaaccgaa agggactggc 180
 catgcacccc ggggtcgtca aaacaattan gagagggcga taaatccttg aaaaaaaaaa 240
 a 241

<210> 281
 <211> 425
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(425)
 <223> n = A,T,C or G

<400> 281
 tgagagagca ttaactatgc cccccagctc ctcgggggcca ccctggaggg gagactcaca 60
 caatctacct tcacgctgga gcaacccctg ggccaattca agaacgtcaa cctctctgac 120
 ccagatccca tctggctggt ggtggctcac agtaacgagt gaaattcctg gcgatgagt 180
 ccgagggacc cgtggctgag acactgtggt ccgaggagat ctacctgcag caagcccaga 240
 cattccgaga agctccaggg tcccagggna agggcactgn ggncatnatt gccttcttgt 300
 caatcctact gggcattctg cttgnggnncn ttctcgtact ggtcatattc cgcttgcatg 360
 annaactnn nggnttcagn ccacaaggan caaggggggg atgctgcact attatccgcc 420
 ccaca 425

<210> 282
 <211> 267
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(267)
 <223> n = A,T,C or G

<400> 282
 actgagatgc cttattggag gaattggaac gctgcacctt tcaggacagt gaggnatatt 60
 caaatccagt ttcttgtcan nggntnnngn aatccacaga ggagagcaag attccccaaa 120
 ctccaaagac cttgtcatcg cagggttaaca caagtccctt gaaggtnaca tttgaactat 180
 tgtagtgtn ngacaaatca agngngacaa catttctaaa aattgnattc cacataggnn 240
 tatattttgn aaattataaa aaaaaaa 267

<210> 283
 <211> 328
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(328)
 <223> n = A,T,C or G

<400> 283
 tgacagtaag gaacccgaga ctccatagaa nageccaccg caggetntan atcctgcagt 60
 cagaggaaga aggtgggact gactcccttg gaactgagtc gctcanagtg gggccttcag 120
 tangnctcc tatagtcagg agaggggcct gannatggtc cagncagcac antanntgan 180
 gctgccactt taccctggng aactgacccc catcctagcg cccacttcc ggatcccccg 240
 ggctggcgag atattgaacc aganccccta aagtcagagc cacctactaa ggtcggagg 300

agccattcaa agtaggatgc caaccctg

328

<210> 284

<211> 274

<212> DNA

<213> Mus musculus

<400> 284

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| tgaagccctg | acaagcatgg | aacttacctt | ggatatggag | ctggtatatc | tcaaggagaa | 60 |
| cttgccatga | ccctcctgcc | tctgccttct | gagtacacaa | atgacgatgg | tctcgcttca | 120 |
| cgacacccag | tcagctttct | ctgccagaag | cattcggacc | aggaggagtg | ggttattttc | 180 |
| ccaggagatg | ttgcattcct | gattgaacat | gctggccttg | agataagggc | ggccccgaga | 240 |
| taacagtttt | taaaaaattc | ataaaaagga | tgga | | | 274 |

<210> 285

<211> 297

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(297)

<223> n = A,T,C or G

<400> 285

| | | | | | | |
|-------------|------------|------------|------------|------------|-------------|-----|
| cagcgggtcaa | gatgtcgctn | cntcatccgc | acagganctt | nccggacnng | acggggactac | 60 |
| acatgccgtc | cacctgggtc | cctgtccgtc | gttcacanat | acnttcccca | cngangagca | 120 |
| cacacngtag | acngcnggac | ngcntgtggt | cannntgtct | gtcggcgctc | cnacggaaacg | 180 |
| ggattggaag | gacggactcc | acaaggtgcg | ctgtgtcacc | gaggccgcca | ggatggagnc | 240 |
| actctnacga | ttctcaacag | gggctagacc | gcggtacaga | aattgtcctc | ctcaata | 297 |

<210> 286

<211> 449

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(449)

<223> n = A,T,C or G

<400> 286

| | | | | | | |
|-------------|------------|-------------|------------|------------|------------|-----|
| tgaggcaggt | gcagtgaagg | actatattaa | gatgctgctt | cagaacgact | cccttaaatt | 60 |
| tctggtcttt | gcgaccatt | taagtatgct | ccaggcttgc | acagaagcag | tcatcgaaag | 120 |
| caagtctcgt | tacatcagga | tagatggaag | ngttccatct | tcagaaagaa | ttcatctggt | 180 |
| taatcaattt | cagaaggacc | ccgatactcg | tgtggctatc | ctgagcattc | aggctgctgg | 240 |
| ccagggttta | acgtttactg | ctgcgagtca | cgttgtcttt | gctgagttgt | actgggaccc | 300 |
| tggaacatata | aaacaagcag | aagaccgagc | tcaccgaatc | ggacagngca | gttctgngaa | 360 |
| tattcactac | cttattgcaa | atgggnactct | ggacagccta | atgngggcaa | tgctgaatcg | 420 |
| aaaggctcag | gncacagga | gcacactga | | | | 449 |

<210> 287

<211> 337

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(337)

<223> n = A,T,C or G

<400> 287

| | | | | | | |
|------------|------------|------------|------------|------------|------------|----|
| ggaccacatg | gcattctgtg | ttcgaagtga | ggagatgtgt | ttatcccaag | tgtttctcca | 60 |
|------------|------------|------------|------------|------------|------------|----|

```

ggtggaggct gcgtattgct gtgtagctga gctgggagag cttggcttgg ttcagttcaa 120
agatctaaat gcaaatgtga acagcttcca gaggaagttt gtgaatgaag tccgaagggtg 180
tgagtcactg gagagaatcc tgcgttttct ggaagatgag atgcngaacg agatttttaat 240
ccaagtgcct gagaaggatg ctgaagaccc ctctccctcg ggaaatggat caccctggag 300
acgactctag agaagtttgc aaggagagcc tgcagga 337

```

```

<210> 288
<211> 180
<212> DNA
<213> Mus musculus

```

```

<220>
<221> misc_feature
<222> (1)...(180)
<223> n = A,T,C or G

```

```

<400> 288
ccccagactg aaggactgtg agcnngagag ccacatcatc tggacactcc agggctacat 60
agcggccctc tanancgcag gaagctctca ngagttcaaa gacaggctgt gctacntngg 120
aggatctgag atgactgggc ttcttgagac ttgggcttta aaataaatta gtagttactt 180

```

```

<210> 289
<211> 166
<212> DNA
<213> Mus musculus

```

```

<220>
<221> misc_feature
<222> (1)...(166)
<223> n = A,T,C or G

```

```

<400> 289
tacagtgtgg gccaaacact aatatgcata aatngangtn nattatgngg ntgggtctggg 60
catcaggttt ancnttcata aggagcccca ggctcnacct aaccactncc ttataccttc 120
cctcttccag gaaataaaact tcattttctta atgtcaaaaa aaaaaa 166

```

```

<210> 290
<211> 162
<212> DNA
<213> Mus musculus

```

```

<220>
<221> misc_feature
<222> (1)...(162)
<223> n = A,T,C or G

```

```

<400> 290
gaagtaccgt gtagctgaag atgaccttga acttctaata ctggctctgc tccccatttc 60
tgaggattata ggcttggggc actacattcc attaaagagag naggggattg aacctactac 120
tnnagannnn ctnnaanntt ctttgaagac aggggctctc tg 162

```

```

<210> 291
<211> 196
<212> DNA
<213> Mus musculus

```

```

<220>
<221> misc_feature
<222> (1)...(196)
<223> n = A,T,C or G

```

```

<400> 291
tctgggtgta ttttatataa ccaaacatgt catggctcctt cacagcatac aaatagtttt 60

```

| | | | | | | |
|------------|------------|------------|------------|------------|-------------|-----|
| gacgttttaa | ataaaagtat | ccagcaaaga | caaaggactc | ncannncnct | acgctgggtgc | 120 |
| nngantctcc | acctgggtca | aagtgaccac | gcctgnctnt | ttnatcgngn | gtgctctgca | 180 |
| cttcttcccc | accccc | | | | | 196 |

<210> 292
 <211> 131
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(131)
 <223> n = A,T,C or G

| | | | | | | |
|------------|------------|------------|-------------|------------|-------------|-----|
| <400> 292 | | | | | | 60 |
| tatacccacg | tgagtacctg | aagnggaagg | aagntaagcn | cncntgccct | gagcnagatg | 120 |
| ntngaganta | tgaccnacaa | ccgnaacgtg | atcaactggag | cccatttacc | cctgngggcca | 131 |
| gtccacatgg | t | | | | | |

<210> 293
 <211> 367
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(367)
 <223> n = A,T,C or G

| | | | | | | |
|------------|-------------|-------------|------------|------------|-------------|-----|
| <400> 293 | | | | | | 60 |
| agagctcccc | cgccagaaga | catgaanaan | catancgact | cgggtaaggg | aaagcgccga | 120 |
| gatgatgggc | tttctgctgc | cgcccgcaag | canagggact | cggagatcat | gcagcagaan | 180 |
| cagaaaaagg | caaacnagaa | gaaggaggaa | cccaagtagc | cttgtggctt | cgtgtccaac | 240 |
| cctcttgccc | tccggctgtg | tgccctgnagc | cagtcccacc | atgctcgagt | ttcttcctgt | 300 |
| agtgtcaca | gggtcccagca | ccgatggcat | tccctttgcc | ctgagtctgc | agcgggttcc | 360 |
| ttttgtgctt | ccttcccctc | aggtagcctc | tctccctctg | ggccactcct | gggggggtgag | 367 |
| ggggggtt | | | | | | |

<210> 294
 <211> 422
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(422)
 <223> n = A,T,C or G

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| <400> 294 | | | | | | 60 |
| gactgagaac | agatacaact | tcctggttcc | cctcctgtaa | aatcgtggct | gttgaatggc | 120 |
| ttagagtcc | gaagatgtgc | gagcacacga | taccacacca | ggccaccagt | tctgttccta | 180 |
| ggagtgtgga | tggtacctaa | tcctttcaca | gccttctggc | tgacattttc | tacacagtga | 240 |
| atgggagttg | cttttttttt | ccatgctgct | ttttctacgt | ctgagtttct | tggacacttt | 300 |
| ccagctgcac | accaaaacag | cttccttggt | tgtctanacc | gtcggtaatt | gactcaagcc | 360 |
| gtcccccttg | gaagccatgc | accggacttt | ccttgcatgt | cgtataanag | tgcttgcgta | 420 |
| gattcctaga | agtggatgaa | ccagccaagc | agctatgtnc | ctggngcgat | gttgatagct | 422 |
| gt | | | | | | |

<210> 295
 <211> 105
 <212> DNA
 <213> Mus musculus

```

<220>
<221> misc_feature
<222> (1)...(105)
<223> n = A,T,C or G

<400> 295
atttttcctga aagtaatatc ntncacagaga agcttccctg gnacctgang tacacctncc      60
tgcatgannt cccacagnacc agcagttata accaggacta tactg                          105

<210> 296
<211> 178
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(178)
<223> n = A,T,C or G

<400> 296
cctgggacat gttttctgga agagcnatcn aacgantgga acaaagaatg atnaccgtnt      60
gctgcaggct gtggaaaacg nagangcatg anaangngac ctcactgctg nacaanaaag      120
ggtccagccg ccacgaagca tgacaccgag ggcattnnacc agcgtaggag agaatttt      178

<210> 297
<211> 114
<212> DNA
<213> Mus musculus

<400> 297
actgagaggc agatctgaca aattctggca gttctccctc tgaggatgat gccctgcctt      60
caggttctcc ctggagaaaag aagctcagaa agaagtgtga gaaagaagaa aaaa          114

<210> 298
<211> 274
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(274)
<223> n = A,T,C or G

<400> 298
cgtgggaagg tttcccagcc gagnccaggg acctgcaagc ctgtctactt gtccttgag      60
ctggaggaca aggaacagca ccagggtgtc cagcccgtgg acggnccaggg aagtctcgtg      120
agcagcctgg ccgttggtgc cctctattgt ganggaggag agcancgagg aggttnttgc      180
catagctgct acttggtgcta aagaactcgg acatgancct gtccctgctg atcttgggag      240
aagtgcgcac cccagagccc ccagaatctc tcaa                                274

<210> 299
<211> 244
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(244)
<223> n = A,T,C or G

<400> 299
gatccagagg atgataaaga aatgatagca gctccagana taccaactga ttttaatcta      60
ctgcaggagt cagagacaca cttttcttct gacacagatt ttgaanacat ntgaaggana      120

```

aaatcanata ncaaggcaca ggcaaaactt tnttttttaa ggcnnggggg ggtccagcag 180
 aaaagggtna aagaggaaat ggtaggagga aaacctcctt ctnggctcac acccgaatga 240
 acgg 244

<210> 300
 <211> 130
 <212> DNA
 <213> Mus musculus

<400> 300
 agaggcaaag aatgttgctc ctacaaagga actctcctga cagaagtcca cagaggacag 60
 atggatgggg atgatttcca cactagtcc taacttttaa taaaaccaag cctgcagccg 120
 tgtaataata 130

<210> 301
 <211> 122
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(122)
 <223> n = A,T,C or G

<400> 301
 cataactaaca gaggctgggg gggattntgt ottggntntc attangacca nngcgnccct 60
 attgatctnt tcatggngga aattgtggag atgaggcaca agtcngaaac ggacacacag 120
 gc 122

<210> 302
 <211> 131
 <212> DNA
 <213> Mus musculus

<400> 302
 gtgtcgtcaa caggaaagtg ttgtctcaga agaggagcta agatgggaag tatgggctag 60
 gacgggaagt gcaggtctac tacaggacca ggtgaaaaat aaagtcactg aaacaattca 120
 aagaaaaaaa a 131

<210> 303
 <211> 164
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(164)
 <223> n = A,T,C or G

<400> 303
 gatgtaccct gctaccacca gggccttgct tcccgtgtag ttgccaaaag aaaaatttnc 60
 gctgccccat cctccttgct gagaagnctt cctcctttgc tngggcattt ccgctgcccc 120
 attgctcctg ttgaaaagga cttnccttt tgcttgggca tttta 164

<210> 304
 <211> 536
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(536)
 <223> n = A,T,C or G

<400> 304
gaactgaggt tcttcaggag atgtagctga aacgggttggg gaccaatcag tcctgtgtga 60
gntctgatnt atanggncca tgtgcagcnn ctacaggncn cgggnaacac ntantgacac 120
tganctttnc agcacgngng agaggngctgc nttcntggnc ncntcntatn ccnancctc 180
nttccaagag cgcacctnac aatcctgcna ccagtccttc nggtggcanng tctganagca 240
tgcacaggtc aatgacttct tgcagacaca ggaaatccac gcactcaant ccagctngag 300
atgttnctcg gagctnttca nagtcggnac tgcaacacaa aggagcangc aggcctnctc 360
cagactncta tntaggattt gcccaggaag taagcatcng tcagactctg nacattcctg 420
ntagangtnc catgtacttg gcagcattcg agtnttcta cgttnaaaga gaaattcttt 480
aanaagaatt tccagaagct gggcgtggng gacacgcctt taatcccagc actcgg 536

<210> 305
<211> 324
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(324)
<223> n = A,T,C or G

<400> 305
actgagtgc accagggcaa aggccataa ctccttncat gctgncttcc tgatacacia 60
agcatcacia acctctcgan ttacctctgc caccgcgcaa ctccacgagc cctcttctg 120
tcccctgaat gccatgcttg ccagcaaccc ctgggttcaca tcngngactt aagggatccg 180
atgaagatat gtggaccagg atgctctgtc tttgagcagc ctactctaata ttcttttttg 240
atgctccctt ttagttcctc gaactaagct gcttctttgc taagtacaca tctgctaaat 300
aaacttcagc ttaaaaaagaa aaaa 324

<210> 306
<211> 164
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(164)
<223> n = A,T,C or G

<400> 306
gccacctggc ttctctttct agaggaccna ggttctatnc ccagtnntga cattggaagn 60
tcanangagn agtgntnctn cgtnctaaat ctgaagtnct ctctgacctc tttgggnact 120
gcacacacat ggncaaaaaca cctagatgca taaaataaaa ataa 164

<210> 307
<211> 481
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(481)
<223> n = A,T,C or G

<400> 307
tgagaattta agaagctttt attcatgtgc atgtcataga agatgaattc atcctcttct 60
actatgaatg aagaacctga tgctctatca gtagttaacc agctacggga tttagcagca 120
gatccactaa atagaagagc catcgtccag gatcagggat gtttgcttg ccttatttta 180
tttatggacc atccaaaccc tctgtcgnt cactcagctt tgcttgcgct acgctacttg 240
gctgaatgcc gtgcgaatag agaaaagatg aaggggagagc tggggatgat gctgagcttg 300
cagaatgtca tccagaagac tacaactcca ggagaaacaa aacttctggc ctcagaaatc 360
tatgacatcc ttcaatcctc caatttggt gatgggtgata gttttaatga aatgaatttc 420
gcgtagaagg aaagctcagt ttttttttg gaactacaaa caaacgggcc aaaacagtag 480

```
<210> 308
<211> 356
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(356)
<223> n = A,T,C or G
```

| | | | | | | | | |
|------------|------------|------------|------------|------------|-------------|--|--|-----|
| <400> | 308 | | | | | | | |
| tcttgtggaa | ctcttaaagg | ctcgtgcagn | anagcatggc | ntggtnccnt | atngganttc | | | 60 |
| tttacnatgt | cgngtgcctg | ttgatccacc | tgaaggagta | tggccaccag | gttcoctgaaa | | | 120 |
| gggggaaaga | tgaaatgggt | caatctacct | gagggttaaa | acgtcacttc | ttgattggaac | | | 180 |
| agaggataca | acaccagggn | nnnatgtncn | ctncttgnan | agttnctgac | tcnctggacn | | | 240 |
| gcgacgtctg | nntgacncac | atatagatgt | tnctgtctng | ntnnacgncc | ttgactgnct | | | 300 |
| aacnccccgc | tgaattata | ttatcacaan | gaggnacctc | tacctcaaag | actata | | | 356 |

```
<210> 309
<211> 188
<212> DNA
<213> Mus musculus
```

```
<220>  
<221> misc_feature  
<222> (1)...(188)  
<223> n = A,T,C or G
```

| | | | | | | | |
|-------------|------------|-------------|------------|------------|------------|--|-----|
| <400> | 309 | | | | | | |
| acttgaacat | acccaagatc | tctttctact | cattgcaact | tctgaatcga | tcttctggtc | | 60 |
| taagaaaaag | gatcaagatt | ctgtgatnng | aggagctgaa | naacgttata | annctacatg | | 120 |
| tgncctgtgtt | tttctgtttt | cttgnaagggt | acaattaatt | tcttctctgg | ttttctattt | | 180 |
| ataaaac | | | | | | | 188 |

```
<210> 310
<211> 266
<212> DNA
<213> Mus musculus
```

```
<220>  
<221> misc_feature  
<222> (1)...(266)  
<223> n = A,T,C or G
```

[illegible]

```
<210> 311
<211> 179
<212> DNA
<213> Mus musculus
```

```
<220>
<221> misc_feature
<222> (1)...(179)
<223> n = A,T,C or G
```

<400> 311
 gtgggttggtg acactcaaga agcctaccag agagngcctg ggtatgaacc ttgatggtat 60
 caaagagcct gggtcnggtg gtananagcg gctgncncaa gngaggctcg agcatctcca 120
 agnnactatt ggaggncaact gtaccacact ggctttgaac aaacggctgc cgggggaag 179

<210> 312
 <211> 129
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(129)
 <223> n = A,T,C or G

<400> 312
 ttaacctgat gatggangag atgatcttna ccttgctgac acacaccngt ancttnantg 60
 acctgnagga ctgtgaccaa ntccacgtgn atgatgtctc atccngatga caatggtcag 120
 gatttaagc 129

<210> 313
 <211> 263
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(263)
 <223> n = A,T,C or G

<400> 313
 tctctatctc cgccgtgggtg atgtcctatc tgcagaatcc tcagcccatg acggcctccc 60
 tggatgatgcc acctaggagg gttggatcct ggactcaggc ccacctctc tctggcctag 120
 cctttggctg cctccgccct ccctcagctg ctgtcctaaa ctttctctgag tgtgggtctct 180
 gggctcccan ctgaatggaa ggaagntggc cctttctttg gggccctgct tctgctttga 240
 caaagagata aacctgcaga ctt 263

<210> 314
 <211> 436
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(436)
 <223> n = A,T,C or G

<400> 314
 catgtgatga gccagaagct atcnnatga ggaagatagg cctatcatca tggaaggagc 60
 caaccagcca gagacggaga gcagaagcca gtaggggctg agcatgaaga ttcagttcct 120
 ggacactaag actgttggtta tatccagctc agacctgcga gccacaggcc tggcctccag 180
 tattatgatg gagtacttgg gccttacctg gnccagccct tggttctggg ttctgcagac 240
 tgctgtttga cctctggctt tgagacatgc ccaaagaagg gctggctggt cttcatggcg 300
 tgctaagcca gtgcctcaga actcaggagg ccagcctggg gtccanaaga tgaccacctt 360
 accttaggac agccacttgg actcagcttg tggagggggg tcttgctggg ctggagtnct 420
 gtgcctgggg ggggtct 436

<210> 315
 <211> 196
 <212> DNA
 <213> Mus musculus

<220>

<221> misc_feature
 <222> (1)...(196)
 <223> n = A,T,C or G

<400> 315
 aagacaagag gagagatgga gaagtgccat gactcagggg agaaggatgg gacgtaggag 60
 cttcaggagg gaaagccaac cagccatgtg agaattcggg tagctcctgc aagggcacac 120
 tgtgcagtgc atctggctga gaaccaaagc gatgtanccc aaattaccag tacaagcttc 180
 tgagatcctg gaaaaa 196

<210> 316
 <211> 237
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(237)
 <223> n = A,T,C or G

<400> 316
 ctgtgaaagt gatgacnatg acagaacgtg ncacgnagc tctagtgact ggactccgcg 60
 gccgcggata ggtccatata cttttgttca gcaacatctc atgattggca ccgatcctcg 120
 aacaattctt aaagatttat taccagaaac aattcctcca cctgagctgg atgatatgac 180
 gctggggggag attgttatta atatcctttc agaaccacca aagcggaaaa aaaaaa 237

<210> 317
 <211> 142
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(142)
 <223> n = A,T,C or G

<400> 317
 atacatgaga aaacanggaa gagaaaagag atgcactaac ctttgaatat accaacadat 60
 tggcagagat caaaggaagt taacagtgtg tacccaaaga accatgccgt tttaatgaac 120
 aanactgcct atgaataaaa aa 142

<210> 318
 <211> 104
 <212> DNA
 <213> Mus musculus

<400> 318
 tgaggctttg tcacctctg cagacctcat ccgccagcga gagatgaaat ggggtggaaat 60
 gaattattca attaaaaagt ttactttaga ccacaaaaaa aaaa 104

<210> 319
 <211> 125
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(125)
 <223> n = A,T,C or G

<400> 319
 agttgtgggc acgtgcctct tccagtttga cagcaagtgt cttttacctt ctcagccacc 60
 tgagaacca gaagagttgg ttttcaaagc tgagctctga ctaataatna aactagaaac 120

aacaa

125

<210> 320
<211> 231
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(231)
<223> n = A,T,C or G

<400> 320
gtactctgag ccctgatcan naaagagctt tctgaaagac ctatagngca tggctgcnng 60
gtgtncacag ggtttccctg tgtattctat nccttggana ntggagantg acnctcactg 120
cctgtggacg gatcatgtnc tnggggcnct ctgaggacta nnagnanccn tcactttgct 180
ngnctgccac nggaattcag ngttgtggca natggagatc ccttggggcc c 231

<210> 321
<211> 266
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(266)
<223> n = A,T,C or G

<400> 321
gactgagttc cggactccgg ggttctgatg ggctgctctg aactocgtnt gaccaggctc 60
acacatcana gatatgcagg canaaggatg tatagangga ggaggaggag gaagaggagg 120
aaatgnntng tctgnaccnc ttnatctcan taccctatct cngccnttcc tatttntnct 180
acntagtant ncttctcnt cgcctgtgg tncctgcgctc ttcattcttg ctttctgng 240
ctgntatggt gctcactctg agaaca 266

<210> 322
<211> 122
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(122)
<223> n = A,T,C or G

<400> 322
cttctcaagc tctagatgac tcatctanct ngacacatgc nggcctcatt cgggtaagaa 60
gccatttnaa tgtcgatcnn gtgcanttat gtggcctcta atnancgtga ggtgaccag 120
ac 122

<210> 323
<211> 238
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(238)
<223> n = A,T,C or G

<400> 323
tcgcaggtga agccttctgg aacgcgtaca cagcaggncg tgagggcngt gcatncangn 60
taccacactc tncggncntnt angnctcat agggctcaga caaggctcct gcananaaca 120

caggccangc cncctgnat ctggctgccc tttcactngt tgnatgcgga agccggctgc 180
cncantcctt ctcccacagt acagnagnac tcncngccac agtcacggtt tcgggcgc 238

<210> 324
<211> 110
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(110)
<223> n = A,T,C or G

<400> 324
gtcaatgcgt gttcctgaac aagaagatgt ccactgtccc ncaggaaagc caggatgggc 60
aagaggaaga agtcactggt gaagatggtg gacagagaga gtcagacgat 110

<210> 325
<211> 181
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(181)
<223> n = A,T,C or G

<400> 325
ccgagggtgt tcgtgttgat ttacagttat ggagatttga ctgaccatat ngagaccna 60
aaatgggaaa atattgttta gaatgaacat ggaactgttc atggaacaaa aatgaaagat 120
gtcaataccc gngaaaagga taaacatgta gtaaagnag gatatcatga aaaaataaaa 180
a 181

<210> 326
<211> 174
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(174)
<223> n = A,T,C or G

<400> 326
tgctctatag aacctttcta aacagggtcca ctacccctt ctgcatccct tcttgtatcc 60
tttctctcct actacctctg gtgagtagta gggctaaaag gaaagttaa gcttttaaga 120
accatcaggg gngngctttc atgaggaaaa tacctaatat taaaacagaa aaaa 174

<210> 327
<211> 179
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(179)
<223> n = A,T,C or G

<400> 327
acctggcctc atacaaaccc tgnagatggg ttnttnaccc gagangtttg tngatttcan 60
ccaatgatgn tcatggggaa atgaacatan acagacctna tnttctaaca gaagcccagt 120
gnancacacc cttgatagng tnctgaacat gactgcagat gggttctgata aaaaaaaaa 179

```

<210> 328
<211> 343
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(343)
<223> n = A,T,C or G

<400> 328
gactgagagc cgcacatcggct gtcttgtgga agagtcggtc acggtcacat ctgggagcag      60
cactgtcgtt cctgtctcgn atgtgctcct gtgtcacatg tcacctgtca tcttcagaac      120
ctggaagtta tgacttcgag aagccaaggc ctgctcagnc cacatggnan ccctaaagan      180
agcgganaaa ctgactgcac tgnacngngn ngggcttggc cgaggatgcn ctagctttca      240
ttcgnccgctg anaccgcan agttgnatta gcttctngca aagctcaaga actgtacacc      300
accaccctag ngcatgcang aggcccttgc tatatgcaga ata                          343

<210> 329
<211> 107
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(107)
<223> n = A,T,C or G

<400> 329
agaatcttct cagggtccnt ctggactntt cggccnaagg atggactatg gnnnaagatg      60
ccggaccctg atttcacagn cctgagacgt naaactcctg gtggggga                      107

<210> 330
<211> 255
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(255)
<223> n = A,T,C or G

<400> 330
agaagtcctt tttacccaat actttangtc tgtctaccaa atcatcacag gtaagaatgt      60
gtcataatga aagccactat tttgcataca taaagaagaa nccacaaggc agaactgnag      120
nnangactct gtggctnaag gggcttgccc ctgagcctat gatctgagtt tagtccctgg      180
gacttgaaca gtggnaaaga attgnttcta tcaagttgtc ctttgacctc tacacgtgca      240
cagtggcaca tgcac                                          255

<210> 331
<211> 459
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(459)
<223> n = A,T,C or G

<400> 331
ctccacacag agactgaang ccaggctgcg gtggatggac cangatgctg nggnttgacc      60
anactgctgc ggatggacca ngctgctgcg nntggaccag gctgctgcgg ttggaccagg      120
ctgctgcggg tggaccaggc tgctgcgggt ggaccaggct gctgcgggtg ggcctcgctg      180

```


| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| nctccatgcc | ntgtcctcnc | cactgattat | agatctctgc | gatggaatcc | tgaggaattt | 120 |
| tcacaaacac | ttcttttgca | ncttcattgt | tctttaatgc | tatgaaaaaa | attcantata | 180 |
| tataaacttc | tgg | | | | | 193 |

<210> 336
 <211> 408
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(408)
 <223> n = A,T,C or G

| | | | | | | |
|------------|------------|-------------|------------|------------|------------|-----|
| <400> 336 | | | | | | |
| catggatggg | tagctgagat | aaaggaaaga | caaaggctgg | ggctgngng | cttgttgcc | 60 |
| gacgccctgn | gagctgaact | ctgggactgc | tggttgccat | cccaggaagt | gctgcttatt | 120 |
| tgagggtgnc | tggtggaat | gggtaatctc | cgaggatgtc | tgacgcctgc | ttgttgtag | 180 |
| ctgtgactgg | ggaaccccaa | ggcagaggca | ggggtcaggc | agctgagaag | cagcagaaga | 240 |
| acacacttag | attcaccttc | tggtcttaca | atagttcaaa | tatagaatcg | aagtgaaatc | 300 |
| tcattggatt | atgcctctct | aatgaaaagc | gagctgtttg | actatacgga | aaatgtgctg | 360 |
| acattaattg | cttctgttta | ttaaagggtga | tttgcaaatt | aaaaaaaa | | 408 |

<210> 337
 <211> 485
 <212> DNA
 <213> Mus musculus

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| <400> 337 | | | | | | |
| gagtcctgg | ctccatgcc | caaacgcac | ctggacgggt | aacctcagag | ctgtgaagtg | 60 |
| gatggacatg | gaagcgaagc | atggaggctg | ccatggtcac | tacgtccatg | gcatttgtat | 120 |
| ctatggaaac | ggagacttgc | agtggctgat | taattcgcaa | agcctgtttg | ctaacaatt | 180 |
| tgaactcaac | acataccctc | ttaccgtgga | atgcctggaa | ctgaggcttc | gagaaagaac | 240 |
| actcaaccag | agtgagatcg | ccatacagcc | gagctgggat | ttctgacctg | cagcagctcc | 300 |
| ggcctaaatg | gaaattgaag | acgtaaagaa | gagctttctt | ttccaagaga | ctctggtctt | 360 |
| ggctatgctg | aagacttttt | taaaaaatgg | ttttcagggg | accgtgagga | tttggaacaa | 420 |
| tggtctctgt | tgcaatatcc | actgagcact | gtaatacatt | tgacaggatg | gctgaaaaaa | 480 |
| aaaaa | | | | | | 485 |

<210> 338
 <211> 338
 <212> DNA
 <213> Mus musculus

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| <400> 338 | | | | | | |
| gaagagctca | gcacacagac | tcaaaagtac | aaggatgaaa | tgtcacagct | caactgcagg | 60 |
| gtccttcagc | tggaaggaga | gccttctggt | ctccatacac | agaaggaaga | gaaccacggg | 120 |
| gctatccagg | tgtaaatgaa | gaagctggag | gaggcagggg | gccgggagga | gcagcagggg | 180 |
| gatcaaatcc | aaaacctgaa | aattgaactt | gaacgtgtga | atgaggaatg | ccagtactta | 240 |
| agactgtcac | aggcagagct | gacagaaagc | cttgaagaaa | gtcgaagcca | gctctacagt | 300 |
| gtccagctga | ggctggaggc | agcacagtcc | cagcatgg | | | 338 |

<210> 339
 <211> 370
 <212> DNA
 <213> Mus musculus

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| <400> 339 | | | | | | |
| tgagatcctt | ctccggggat | ttcggtttgg | gacgaaagcc | acagtgactg | ggcagtttca | 60 |
| gggatgagca | aagtcagcct | cgagcctgtt | ccatcaaggc | accaagcccg | gcgacaccaa | 120 |
| cgctcaggag | gttttttagt | ttcatggctg | ccttgtggat | ttgtttcttt | acagtcattt | 180 |
| ctttattgag | aaagggcaca | caccaagggt | agaggccact | tgccagagct | gttcttctcc | 240 |
| tgccctgtag | gttccaggga | ttgaactcgg | gcgagcaggc | aagtgggatt | taccctccga | 300 |

atagctgtca gcccaaagtt gttatttaat gaaatctgac ccgaggtatt agaaatcgga 360
 aaaaaaaaaa 370

<210> 340
 <211> 233
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(233)
 <223> n = A,T,C or G

<400> 340
 gccttatgag tacgtncna cncacacgcg ctgaacctga atcaccacaa cctcgccctt 60
 ggatgacagc cnaanncttt ngcattntgn ctangattnc ncgangcacg cctgtctaata 120
 agccnagcct gttgatctaa gagagcatnn ntctccnana ctcagctcng naaggagagn 180
 tgggcgaatg gatccaatct gagatagtgc tncgtgctgc catgcatggg aac 233

<210> 341
 <211> 230
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(230)
 <223> n = A,T,C or G

<400> 341
 ataggaaatg aagcgccttg agccacatca tgggtacagcc aaaccacagaa gccaggctgc 60
 gaaggttaaa gccacagagg cagtgaggag cacacgcctc tgggtggacc tcagatgcct 120
 cgcagcgaca gtcatoctac acggtgtgta tttagacagt gccacctntg acttaagtnc 180
 agttttcaca gacccgagat aaggcggggg gggggggggg tccccctgcc 230

<210> 342
 <211> 122
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(122)
 <223> n = A,T,C or G

<400> 342
 aagcctggcc tctcccatta cagagagggg gaagatggat atttgggggc cttacgattg 60
 tcatncccta ccagctgtca cttccagacc acccccact ccaaacttgg ctttaaactt 120
 tt 122

<210> 343
 <211> 274
 <212> DNA
 <213> Mus musculus

<400> 343
 actactttgt ggccaccct gtccttgaac tcagagattt acctgcctct ccagcactga 60
 gaagattcag gaattctgat accggcttcc ctggctagaa accttttaag agtactgtta 120
 tatttggtac tggggaaatc caccttccat aaccctgctg ggacataact attaagaaga 180
 cgtttgctac tgacttctgt cttcccttgt tgattgtgcg gtgttctttt tttgcaataa 240
 accattcact agtcctccta ggcaaaaaaa aaaa 274

<210> 344

<211> 210
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(210)
 <223> n = A,T,C or G

| | | | | | | | |
|------------|------------|------------|------------|------------|------------|--|-----|
| <400> 344 | | | | | | | |
| gcagttttgt | tctttcaaaa | taagaaccaa | gacccagggc | ttctgcagaa | angaatacag | | 60 |
| tctgaactgt | ctgtgcaatc | ggtcgtcctg | tcccctggca | aatagtcagt | atgctaccat | | 120 |
| taaagaagag | aaaggtacgg | gagctacacg | acaatttata | aacggatgtc | cccagcctct | | 180 |
| gtaaataata | ataataaagc | tgtctaactt | | | | | 210 |

<210> 345
 <211> 143
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(143)
 <223> n = A,T,C or G

| | | | | | | | |
|------------|-------------|------------|-------------|------------|------------|--|-----|
| <400> 345 | | | | | | | |
| ggccaatcca | cgtctttctca | actcctcatc | tgtctctcaca | tcacatccaa | tccaactggc | | 60 |
| aangngntn | ctgctaccan | ngcagaacag | ncccatccca | tcaccccacc | cacactaaaa | | 120 |
| gaaagnactt | acagaaatac | caa | | | | | 143 |

<210> 346
 <211> 270
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(270)
 <223> n = A,T,C or G

| | | | | | | | |
|------------|------------|------------|------------|------------|------------|--|-----|
| <400> 346 | | | | | | | |
| gagaagcctg | actcctagta | gannctgagn | cttctgcact | atnntccaat | ngtgnacaaa | | 60 |
| nntgntctnt | ttgnggaaca | naaagaaatc | cgatccctct | gngnagnnga | ttgggaanga | | 120 |
| atncgattcc | taaatgagan | gctcgagggt | gaggcacctg | tttctgaact | ctgcggttga | | 180 |
| gcangganga | cgaggaagtt | ccagcatggc | ctcgggggat | ggtggctaag | ggacagagcc | | 240 |
| caaagantnc | ttcacagaga | ccacatattt | | | | | 270 |

<210> 347
 <211> 467
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(467)
 <223> n = A,T,C or G

| | | | | | | | |
|------------|-------------|------------|-------------|------------|------------|--|-----|
| <400> 347 | | | | | | | |
| tgagggtctc | tcccanacct | gagtggaggc | anaaccccn | tgggnagttt | tgttgcttgc | | 60 |
| tgatccactt | ncggtctngg | atgctgtgga | caggctctgat | gaagacaggt | cccgtgtggg | | 120 |
| ccgggaagac | tcagagggtta | gataggcgan | aagcacgagc | gattacctga | aaaatgctgt | | 180 |
| gtgcatcatt | atcgcccana | nagtgccttg | gcgtggngnc | ggatcccatt | gtgagtgatg | | 240 |
| tcttctccgc | tgatgcagtt | ctcatggtct | ttgtncactg | ggacacccaa | naaggcacc | | 300 |

| | | | | | | |
|------------|-------------|------------|-------------|------------|------------|-----|
| tggacagtct | ttcctggcag | caaattgtan | atctgtgcat | tggagganaa | caaagggctg | 360 |
| gacctggagg | caagatgcag | aggctaacca | taaaacccgn | gaggcattct | tcgaagcctg | 420 |
| tacatgagga | cnccttctctg | gaaacacaaa | ggcatttttaa | aagacat | | 467 |

<210> 348
 <211> 344
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(344)
 <223> n = A,T,C or G

| | | | | | | |
|-------------|------------|-------------|-------------|------------|------------|-----|
| <400> 348 | | | | | | |
| gcacgttttg | tgccctnccc | gcctncaaat | tgccctcagtt | acaaatcatt | agggcaggct | 60 |
| tggtgagcaa | gactggcaag | cacatttttaa | ggtcccgtgc | tgtgggggtg | atccatctca | 120 |
| acttgagtca | taagaggcag | aagnggatgt | gagagaaaaga | gacacacact | agagacagan | 180 |
| agccaaaagag | ggcagagaga | cttgacttta | agagactcct | gnactgacaa | ctccatgcag | 240 |
| ttnggaacca | gaacaactgc | ggctgaacca | nggttcattg | ggacatggca | aaacgctgac | 300 |
| actaacctct | tattcagaat | gtcccaacag | gccattcgtc | gtac | | 344 |

<210> 349
 <211> 158
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(158)
 <223> n = A,T,C or G

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| <400> 349 | | | | | | |
| agaaccacca | attgcncgct | cttaaataat | agcnaacagn | gggntgttat | aaggtgcttt | 60 |
| ataatatcaa | atagagcctn | gagcaacaca | natcacaggg | ngctagggag | ggnagagccc | 120 |
| cactgctgna | catgcaaaac | acagatgtga | acccagaa | | | 158 |

<210> 350
 <211> 370
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(370)
 <223> n = A,T,C or G

| | | | | | | |
|-------------|------------|------------|------------|------------|------------|-----|
| <400> 350 | | | | | | |
| agaagtcttc | atcagaaatc | atggcactga | caggctgnng | ttcangttca | ggtgaagaga | 60 |
| atctcacagg | cagatggcag | ctactganga | gcgagttctg | tgataaccgc | agaagggcat | 120 |
| tcgccaaacta | gaaagaacaa | acagggcagt | gtgagtgcc | cgacanagat | gagagccttg | 180 |
| gagggcagag | catcagagat | ggagacccat | cccacagggg | gcctctgtgt | ctgtgagcag | 240 |
| gatgccttgg | aaaggccaac | ttcccagcga | cacagacgca | aaggcaattc | cagcgaagaa | 300 |
| ttgctccctg | tttttaccct | aaaagtgatc | tgtcagctgc | cancctcatt | actttttcta | 360 |
| tttcttttca | | | | | | 370 |

<210> 351
 <211> 145
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature

<222> (1)...(145)

<223> n = A,T,C or G

<400> 351

| | | | | | | |
|-------------|------------|------------|------------|------------|-------------|-----|
| tggtcgccctg | ctgccggctc | acgatcance | ancactagaa | nacccactcg | ctagcggagc | 60 |
| accgcccagc | tcacgcacgc | ggacacgttc | tctatggagg | acccggtgcg | gaaggctcgcg | 120 |
| ggcggcggac | ggccggcggg | gaccg | | | | 145 |

<210> 352

<211> 329

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(329)

<223> n = A,T,C or G

<400> 352

| | | | | | | |
|------------|-------------|-------------|------------|------------|------------|-----|
| tagcatcaga | atgttcctga | agaagaaagn | atttnccttg | nagnacacat | ggagcggatt | 60 |
| tacaagagag | gntnnctgct | tcgccattnt | aggtnanatt | ngcgactgcg | agatccngga | 120 |
| taaganatcn | cggaggcnctn | ctnctttaat | ctgatgagan | acctgnggca | caggaagctn | 180 |
| attgtgggcn | tggtaatttg | ggggggagcnt | ttnagtacaa | acccaanccc | tttttaccct | 240 |
| tttnaaanag | tncttgggaa | caaacgggtt | ccatnttttt | taaccccaaa | tttttaaact | 300 |
| tttgnttggg | acccaaaccc | ttaaaaaaa | | | | 329 |

<210> 353

<211> 129

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(129)

<223> n = A,T,C or G

<400> 353

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| cgtctactcc | atgcanganc | cactgcatan | aaggactgtc | ccaanctcag | aggaactctt | 60 |
| ccaagaaacc | tgtatngact | acttgaggcc | ttgaactgcc | tanagngtgg | gnctgccttt | 120 |
| gcttcctag | | | | | | 129 |

<210> 354

<211> 393

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(393)

<223> n = A,T,C or G

<400> 354

| | | | | | | |
|-------------|-------------|-------------|------------|------------|------------|-----|
| gctgtgcata | ccccgagtgg | ggctcctgtc | aggagaaaag | gccatcgctc | aagaagcngg | 60 |
| ctcagcggca | gctgctccat | gaggagcctg | aagggtggcc | tgcagcagaa | ggaggagagg | 120 |
| acacggggagc | tcgagcccca | ggtgactctc | tgcagagcta | tggaggccag | gagccgcagc | 180 |
| cgtgaggtg | ggtgtccaca | ggttaggggtg | ccaagaaggc | atgtcccggc | ttctctgggc | 240 |
| cttggtatcc | ccacctggaa | gctggaaata | ggaaatgtga | gggagaaatt | aacatgtcaa | 300 |
| atgctcaata | caacgcgcctc | ggggccctac | agatgggtgt | ggtggcttat | gcctatcatt | 360 |
| ttggctttca | agttcaaggt | caacttgggc | aat | | | 393 |

<210> 355

<211> 194

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(194)

<223> n = A,T,C or G

<400> 355

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| gcacccccac | tcgtgttttt | aagtgtatnt | ttataagata | catgtattta | caattganct | 60 |
| tttgttacat | aatgctgaaa | tgctactgga | gatngtgaaa | aatgtttcaa | ttttatctgg | 120 |
| tccttatacc | aaactaacat | ggtntattat | tatcacctta | gtgatacagg | anataatgag | 180 |
| ctaaaaaaaa | ataa | | | | | 194 |

<210> 356

<211> 242

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(242)

<223> n = A,T,C or G

<400> 356

| | | | | | | |
|-------------|------------|------------|-------------|------------|------------|-----|
| tgatgaaga | aattgaaaag | cgacccaaag | aaaaatttac | cagtaaatat | tgctggtaac | 60 |
| aatcgnttag | acttncnac | acagnnnctc | anggnngac | ttttgngctg | antttncag | 120 |
| canttcttgg | accnacgcca | tgtatcaana | ggngnggntg | tgaggtataa | cctcatcggc | 180 |
| gatgtcgggtg | ccttctatgc | tgcgaaacta | cttcagggtat | tacgttgctg | ccagcaagtg | 240 |
| tt | | | | | | 242 |

<210> 357

<211> 236

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(236)

<223> n = A,T,C or G

<400> 357

| | | | | | | |
|-------------|-------------|------------|------------|------------|-------------|-----|
| aggacacgcc | taaatgttgt | gaagttgtat | gttcacaaag | gggattcggt | gactgtgtac | 60 |
| acgagtgggtg | gtaaccccat | cctatttgaa | ctggagaaaa | atttgtatcc | aacagggtatg | 120 |
| gtaaccagat | gaaatgccca | gactgcagcc | ctggtgaaac | acgttattct | ctgttgatta | 180 |
| agggtgtgata | tttggtttttg | ttttccccc | taaacntacc | ttttcaaagt | aaataa | 236 |

<210> 358

<211> 143

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(143)

<223> n = A,T,C or G

<400> 358

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| actctgacca | gactctgang | gcatacacca | gtagaggatg | tngaaccaa | gaagagcacn | 60 |
| tacgttcagc | atctagtcca | gaagatgata | agaagaagaa | aaggaaatct | agtcattcaa | 120 |
| aagacagagc | caagaaaaaa | aaa | | | | 143 |

<210> 359

<211> 129

```

<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(129)
<223> n = A,T,C or G

<400> 359
aaggaaagcc acagcattca ttacgacatg acanntgacn ctatgancaa gtgagcatgt      60
atcngaaaag gagtctngac gaaagaggan tgaatttgac attaataaaag cnattttattt    120
ttaacaaaa                                     129

<210> 360
<211> 256
<212> DNA
<213> Mus musculus

<400> 360
tggctgttct ggaacgttgc tttgtgaacc aggctggcct cgaactcacc gagattaaag      60
gtgtatgaca cctctgccta gctccattct ctactgttct ctacaatgcc cgctaagtca    120
atgccacgga gaacaaaagc tcgctcctcg ctcaccagat gccgggtgga aactacattt    180
accacaagac tgtgaggctc tctagactct gagccaatca caaccagat gaaaagcttt    240
ttctcaaaaa aaaaaa                                     256

<210> 361
<211> 143
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(143)
<223> n = A,T,C or G

<400> 361
ttottgagtg ttttaagtgg atcgagctgc cgctgctaac ctgtgaactg aactgccaat      60
ttccagacaa cacaacaggg agttgctcca aagaaccttt ctaaacaggt ncncttgccn    120
cgctgaatat cgtttctttt gca                                     143

<210> 362
<211> 110
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(110)
<223> n = A,T,C or G

<400> 362
atagtgtgga agatctcagg gaaagngang gaacctgcaa gtgnggnata anagacctga      60
ctcctganng ttgtcttctg accacatata cacaatattg taaataaatg                110

<210> 363
<211> 566
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(566)
<223> n = A,T,C or G

```

```

<400> 363
gactgaggtg ggggtctttct gattgatncc ngaanggaga cngacggang tgaggctcnc      60
acatgagngg aagctgnecat tcccngaggg tgctttcttt agtgagaggn agacagaaaa      120
tcctttttcct tctatggaac agnagagccn gaagggggcag gttcatcact caagccagga      180
aaacatctcc gnttcactga ccggcgccag gcctcacagn ttgggagaag cgacctacgg      240
nnnggaaata gcattgctct gcatgcttat gggaaactgtt agaaaggacn agaagngcag      300
aaccctgctg gagcccgatc cagccagctg ctgaattctc catccgcaag nctccatcct      360
cactcctctg aactggcgct gccagaggca ccttgggaaat nccagcaggt tcctgttgca      420
aatggccctc accaccaact cattgnctct gcatgcacgg ntccctcccag gggctggcgt      480
taaatctgga ctcaacttaag gggntagann nggngnccta atccctttat tttgggnaag      540
gggccaaagt actaaacacc cttgac                                566

```

```

<210> 364
<211> 450
<212> DNA
<213> Mus musculus

```

```

<220>
<221> misc_feature
<222> (1)...(450)
<223> n = A,T,C or G

```

```

<400> 364
actgagggct tgagtcacan ggcgcnttct tggggaccct ggnncgctat cattggnaac      60
nganaggnca ctncnctag ctnatganag gagcanaacc ctcgggnctc tgctggagtc      120
ncaactnggc atntagctca gttttctgtt ncattntctc ccttantact gaanattcct      180
tctgcattca tggcaggggc accagccatc atagacactt gcctnggtat ccggntttgc      240
tgnagggngc aagngcttna gngacacatg tggctgttgc cnttctttct gcaccccanc      300
tcccaactgt tcccaccttc aaccctcttt cccattccaa cgctgctctg tcctatagct      360
tcacaaaaca nggagcgtgt ggggctgang tcaggactgt accttgggca ctattcctta      420
tacaaaatat taaatatttt ttttcctcag                                450

```

```

<210> 365
<211> 119
<212> DNA
<213> Mus musculus

```

```

<220>
<221> misc_feature
<222> (1)...(119)
<223> n = A,T,C or G

```

```

<400> 365
ggagaatctt gaaactctcc catacataac acttcaagcc aaactggcag cactgaccca      60
atctctaaat taagcgcang ngaaatgaaa tcattaaana aatatatatt tcctgaaaag      119

```

```

<210> 366
<211> 183
<212> DNA
<213> Mus musculus

```

```

<220>
<221> misc_feature
<222> (1)...(183)
<223> n = A,T,C or G

```

```

<400> 366
ctatgatgac ctgccangat tctcatatga gcatggggtc ancacctgca gatgacctgg      60
tcagagangg tgggaccgat agggaaacctg ttaaatcctt acactccgaa gatananctg      120
tannaaattt aanagnttng gctnngnntn nttntggaca gcttgccaga agtgggggtg      180
gtg                                183

```

```

<210> 367

```



```

<211> 385
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(385)
<223> n = A,T,C or G

<400> 367
aaggaacatc aacagcagcc ctaccgagaa cgcanacaaa cttctcggtc tngngtgtct      60
cctcagttgt tcagagcttg agttttgctc gaggatgatg agacaaggcn ctaagagggg      120
aaggaggagt gngctaaggc tcctgccact tntctccgnc ttnagtccac angaagcatt      180
gtaagaaggc ctgaanaaca agctgtgctt ggnccctgaat actggngact tgaggattcc      240
atctgtttca ccaggcgtgt agggaggccg ttttagcaac atagcttcct tagcagtact      300
taaagacttt tctctgcatt ggtcatgtgc caagttacat tttgaacatt ggggcaggng      360
aaggaaggac agctttggca cctgg                                     385

<210> 368
<211> 160
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(160)
<223> n = A,T,C or G

<400> 368
tgctcttctt tggcaatcac agcatgttta tttatgaact ggcttgcttg gaacctgatt      60
ctgacatctg nggttttttg ctgaagaggt taattttttc ctttttgntn ggnttgcgaa      120
cctgggtttt ggggagggga gcacaaagga ataaaaacac                                     160

<210> 369
<211> 145
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(145)
<223> n = A,T,C or G

<400> 369
atcatctatc gaatgcggac tcacccagtt ctcaacggng ctgcctgaga gagacccttg      60
aaggcgggat ggcgtgtgat aagggcagag gtcttgcccc tatcctgatt tcagaaagac      120
agcggggaga ctcagaaaaa aaaaa                                     145

<210> 370
<211> 205
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(205)
<223> n = A,T,C or G

<400> 370
cacgcgtgac atcactctgt caatcacccc aagtccactc aagggacaag aaactgtggc      60
acaccaccag aagttttttt gtttttgttt ttgtctgnat ttctttctat tgagtcccca      120
taaatacagc tcaactacac aatataagac agaccaatac atggtgtgtc ctttaataaaa      180
aaaatctttc accacaaaaa aaaaa                                     205

```

<210> 371
 <211> 375
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(375)
 <223> n = A,T,C or G

<400> 371
 gtctctctga acgttctggg acactccact ccatcacggc taaatagtcg cagggcgtgg 60
 ccatatgagc anatacacagn taacgtaacc agtacctgtt gtgaggaggc ntggattgga 120
 taaactgcag gnggtagaag atccaatccc actctcccaa aatactgaac aaatttgntt 180
 atttctgggg tgggagtgan acaggggtctc tccccgtact cctggaactt aggaacttat 240
 tatgtagact aggctagcct caaactcaca ggagtgtctg gatgtgccac catgcacagc 300
 cccaaattcc tttaacacgaa tcttgagcgt ttataaata caaagcggag atgctgcctg 360
 ccaccaaaaa aaaaa 375

<210> 372
 <211> 360
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(360)
 <223> n = A,T,C or G

<400> 372
 ccgtgccaac aaggatgcct tggctgaatc acaagaacga gtgccctctg catcaagaaa 60
 tatgggaaag ngcccaaccg agaacatcag gctggccgcc cgcatcatgt ggcgggtgga 120
 gagagagggc actgggctca cagagggctg nctgggtgtc cgtggatgac ttacagaacc 180
 ancgtggagc actttgggga ggaggagcag aaggaactcc gagtagaccg nggacaccgt 240
 tcttgagta ctggccacca cagagccngc agttcagcat gcagtatatc tcacacatct 300
 ttgngngat caactgcaac ggtttnactt ctnanntgac cagagagggc tacaggcagt 360

<210> 373
 <211> 362
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(362)
 <223> n = A,T,C or G

<400> 373
 actgagattg acgggctaga ggaaaagctg tccccgtgtc ggaaggacct ggaggccgtg 60
 acctcccagc tttaacaggc agagctcagt cctgaggaca ggaggtctct ggagaaggag 120
 aaacacaccc tcatgaacaa agcctccaag tatgagaaa agctaaagct gcttcgacat 180
 gagaaccgga agaacacgct cctctcggtg gccatcttca ctgtcttcgc cctgctctat 240
 gcttactgga ctatgtgagt cagccatctc cagccactan aangacgtgg taagtgtctc 300
 cttctgctta gtaagagggg caataaagag ccccanagtc tgctgtcttg caaaaaaaaa 360
 aa 362

<210> 374
 <211> 390
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature

<222> (1)...(390)
 <223> n = A,T,C or G

<400> 374
 gctcattcaa tcaggtgagn tactgnanaa tatctccagg ncaaagntnt tttcnacaat 60
 ccccttngga aggtgtttcc tattagcaga tgactatgga tcnctggcag cctctggatg 120
 ctctctcgga angctcatg gcgggggcat attgattgtc tttcaattaa ttgcatntgg 180
 tattttttcat ttatcaaaaag caaaataacnt gtnattaact ctgaagcaat acagtccagt 240
 ggcaagagat ccctgtctgt tgctgtctgt gctgtctgctn ctctggagat aagtcagcgg 300
 gaaattattc ttacaaggaa actctaggat ggtaggactt ttggaccgta ttaattaaag 360
 agaataaaaa ngaattaggg gaaaaaaaaa 390

<210> 375
 <211> 119
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(119)
 <223> n = A,T,C or G

<400> 375
 cctgcagact cacccgaaan atccanactg accaanggaa tactaangtc cctcgtcttg 60
 gtgatntnca gggcgtcaat aataaagaga gacgagcagt tgggggaaaa agaaaacaa 119

<210> 376
 <211> 284
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(284)
 <223> n = A,T,C or G

<400> 376
 acctttcttc tttttnaata cactcacagt atcanaacac cacggtttca tttactaagc 60
 tctangagac cattntgnct gtggaggcaa ggggcatttg gncctgacct angtgaacag 120
 ttgccttaaa ggggaaaaaga ttncacagcag ganggctcag ngtttaaggg gcacttgcag 180
 ctcttgcaaa agncctgggt ttggtcccca gcgccacat agcagtcaca actattccta 240
 actccgnggc cagagtctct gaaccctcct ctggcctcca cagg 284

<210> 377
 <211> 255
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(255)
 <223> n = A,T,C or G

<400> 377
 cgtttttcct aaatattgan actggcttgn atcaagacac acagnatatt gttcacaagc 60
 atgtaactat ccaaaagaag tcttataaat attatgagca tggcaaaatc atccaggaat 120
 acacccaaag tgtactttac caagataact tcagggtatc acatgttgag tcatcaaacg 180
 taaacagaca tgaaactgga aacaccagag aaccttgcaa atataaaaaat tgtgtaaact 240
 gtttaaaaaa aaaaa 255

<210> 378
 <211> 110
 <212> DNA

```

<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(110)
<223> n = A,T,C or G

<400> 378
aaatctggaa cctggtgtcc tggccatgtg ctgaatgcac gcacagcaca gctctggnat      60
ctgttttaaa ttatccatta aaataagtac agtcctggaa aaaaataaaa                    110

<210> 379
<211> 210
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(210)
<223> n = A,T,C or G

<400> 379
ctgcgtctgg gatctgcctc aacgccttgn gagtcacccat cnacannatc ggagaatggn      60
ccctccgctt ctccggctgt ntggtcactt nnatctttca gnggnattnc ntangctaataat    120
caaatggacn ggaccancat tttacttgga cggacacccat agnacctacc tcttctnctg      180
nggtctatct aggggggttg ggtgggggga                    210

<210> 380
<211> 112
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(112)
<223> n = A,T,C or G

<400> 380
acggggccatg atgaaatcat ccccgangag catccangaa ggngaagctg agngagcgng      60
gggaggtgtc caccttcaca gaggaagnta tanatcgaac cttgtcaagg ta                  112

<210> 381
<211> 108
<212> DNA
<213> Mus musculus

<400> 381
ccctctgctc tcagccctct gggatthttgc ttgtttgctg tttttgttta gttcagatct      60
atthttgtttg tggthttggaa actthtcagac cgaacagaga aaaaaaaa                    108

<210> 382
<211> 181
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(181)
<223> n = A,T,C or G

<400> 382
catgcataac gggcatccag atgangaatc cgtgaacntt tngactggag ttgatcncta      60
acccaatgga ctttnctgtg gctgaccaan cthttcatca caagcattat atancggttg      120

```

ntgncccctg naaatgtnan canacacgaa gngagatacg ctgtatacga ccactgtgca 180
c 181

<210> 383
<211> 210
<212> DNA
<213> Mus musculus

<400> 383
gtgctagagc gaatccatta taacccaggc agaggaaaag gccgatttcg tgatcattcc 60
ctctgaagga atagagaaca gaacagacga gccagactct ccatcatccc gagactggag 120
gcctgggagc cggggaacct acctggaagc cacatgggaa gaacagctgt tggagcaaca 180
agaacactta gaaaaagaaa tggaggaagc 210

<210> 384
<211> 487
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(487)
<223> n = A,T,C or G

<400> 384
agctccgacc acagcgtcca gaaacagacc ccaaccggaa gaggcggatc ccgatagaca 60
ccaaccggaa gaggcggctc cagatgagca ggagagaggc tgctctaccg gaggtcccag 120
gtttgattcc cagcgcgccac ttggcagctc acaactatct ctaactcgag tcccaggaca 180
tccaatgctc atctttgaca tctgcaagca ccagacactc aaaactgtac agatggacaa 240
gcaggcaaaa gaccccaca cataaaatac gtaaatcgtt ttaaaagtag cagaagaagc 300
anagttaatt agactgaggg acagatagga aaggtcagga gagcatcttg aaaatacact 360
tacctcagct gcaaagaccc ccgctgcagc gcccccaact tctgagaggc agtaagaagt 420
gttgaaactt gtccctnagg ggtatttgac tctaggatgg gactttcttt caagcattga 480
aaaaaag 487

<210> 385
<211> 431
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(431)
<223> n = A,T,C or G

<400> 385
cacgaaacaa attcagncag gcagctcctt ttggggccta agcactggag acactcctag 60
aagtttctgg aaatctttgc tgttggccct gaaagacctc gacctctcgt octgagcgct 120
atacagaaac ttcccgtaga ggcaccgtgg gtcaccattg gtggatctgt tgtatgcttc 180
ctgtgcctcc aacatgtcaa ggccactcca gcctgtaagt cactcggacc cagggaggct 240
tgccaatagc caaaccaaaag aggcctgtga ggctaagcca ccagaagcca ggcacctatc 300
acatctatcg gctcgggaaa atgtcccagt ggcntgttnn gatccanctc ttgaaacgga 360
tcctaccggg aaccnaatcg tacacaacaa aaaggcggcc gacccagacc atcctgacct 420
tgccagcatg t 431

<210> 386
<211> 217
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(217)

<223> n = A,T,C or G

<400> 386

| | | | | | | |
|------------|------------|------------|------------|-------------|-------------|-----|
| aggctggcac | ggctccgacg | tctgtgtgga | agcttctccc | tccttctctga | gcttctcttag | 60 |
| actccttaca | gcgcacaggc | acagacacat | cacactgcaa | tccagggtat | gtctacatnc | 120 |
| gagctgcnc | gnatanactg | gangggcttt | ggangggatc | cnttgncaga | gcacncatgg | 180 |
| tgctggatta | aaatccanct | acaggtaaaa | aaaaaaa | | | 217 |

<210> 387

<211> 284

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(284)

<223> n = A,T,C or G

<400> 387

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| acgcatggac | acgggnnggt | ctactacatc | accacacggg | cccaggtttg | actccataca | 60 |
| ggacctagt | cnggcacata | catggaagt | aatgatggc | tgtgctacnt | gcttacggcc | 120 |
| ccttgtagca | ccactaaacc | cccagacaca | tagantntgg | ncaaggatgn | cgggggagat | 180 |
| nagacctgga | acttcttngc | acttngaact | gcaagcttgg | gcaccntntg | cttanggaga | 240 |
| tnanaactg | ggcacttngg | nactgcagca | caaaagagt | ggaa | | 284 |

<210> 388

<211> 774

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(774)

<223> n = A,T,C or G

<400> 388

| | | | | | | |
|------------|-------------|------------|------------|------------|-------------|-----|
| ccccgcctgt | gtatcaccac | cancgtanca | catgcacgtg | tgcgacaggc | cttacnttat | 60 |
| ggctcntccg | acccactcc | ccggattgat | gtcccnngct | ccggacaanc | tgcaggccng | 120 |
| aaaccttcag | gaaactgaaa | ccnccccctg | ngggcagcct | cccggatnac | ttcctccnaa | 180 |
| tccttcccca | gcaaattggac | ancnttcagg | gtcacccccg | gggctccnnc | cctatgagtg | 240 |
| gagagggagc | ccacctccgg | cncagggcc | catggcctgt | tacnnanaca | gnccctngaa | 300 |
| ncngtacctg | gaaaataaga | gaattgccct | cttcntgcan | aatgaggaat | tcangaaaga | 360 |
| gctgcagcna | aaccgggact | tcctcctcgc | ccngaaaana | aaccnattga | natgtgaatc | 420 |
| ccagaaatcc | aatccccctn | gcggcggttg | ggaaatgacg | gtgggtttcc | ctcctctgtc | 480 |
| ccggaacnt | gantncctcn | naaaagnn | gnangatncc | ttgtgccngg | acancttnta | 540 |
| tncttgggna | attctanctc | angatctntt | tgaantcncn | cancggtngt | aacaaaaccg | 600 |
| ttttnggaat | tgaaagaaan | aanttttccc | tgnntanttt | gatggggntt | gctgtnatnt | 660 |
| gaagncaggc | tcccggtna | antggnaang | gctaggttta | ctaaaaaaa | attcgggtggg | 720 |
| ttngcnaaan | nggatgntgg | gttttgggtg | cnaaaaggcc | gaaaaaaaag | gaaa | 774 |

<210> 389

<211> 373

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(373)

<223> n = A,T,C or G

<400> 389

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| ctatTTTTTg | aagaccttcg | acctccatnc | tctggtcgca | tttctctgtc | cttctggnaa | 60 |
| catcgaggag | ccaccagang | aggatggagg | cacggcgtgg | gacattcatc | atgggttggg | 120 |

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| cacccgcaca | cngtgtgcca | tggtggcttc | acaatgggcg | ttncgngtct | gntgtgtgat | 180 |
| gcactcttag | agcaagctct | gtggctcaga | gggaangaga | cgggatcact | cagaccctcc | 240 |
| cactccatat | ggccagtgag | gcgtccagga | agacgcttcc | tgctagcgtc | atcataaagg | 300 |
| ggaacgcaaa | gctctcagtg | ctttgccctg | agccccactg | gatgtggtgt | gtatgcaaaa | 360 |
| ggaagcttaa | cct | | | | | 373 |

<210> 390
 <211> 388
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(388)
 <223> n = A,T,C or G

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| <400> 390 | | | | | | |
| ctctaccac | ttgtacataa | tccagcatcc | agcagaggaa | agcagagtgt | tgcgcacagt | 60 |
| ccctctgcta | gcagcatgcc | ttccccaga | cagatgcaca | gtcaagattg | gccgccgctt | 120 |
| cagtgaagag | cgagatgttg | aacttgcaac | tgtttgccgg | gactntggta | cattaatatt | 180 |
| atatccaggg | gctgaagcta | ctaattngga | anaattnata | ttanattctc | cngtttatcc | 240 |
| ttccacaatc | atcctcattg | atggtacatg | gagccaggct | aaggacattt | tntataaaaa | 300 |
| ttccttggtc | cgacttccca | aacanataaa | tgccttgctc | agtctcatn | anaanaagct | 360 |
| tccttctgca | gcagatggaa | acattttac | | | | 388 |

<210> 391
 <211> 122
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(122)
 <223> n = A,T,C or G

| | | | | | | |
|------------|------------|------------|------------|-------------|-------------|-----|
| <400> 391 | | | | | | |
| cctgatggac | aacatgctgc | ggatgccacc | ggngatgaga | gcagggtttgc | accgccagct | 60 |
| tnngttcggt | acggcctttg | tnnttgctgg | atacttttat | ttaaaacggc | aaaactatatt | 120 |
| gt | | | | | | 122 |

<210> 392
 <211> 184
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(184)
 <223> n = A,T,C or G

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| <400> 392 | | | | | | |
| tcccagaaca | tggtgctgct | tatatacgnc | cnntgatang | cgtgnctcac | accngattg | 60 |
| ggtatnctct | acgcctcatt | tgcattgtcc | tcatntggng | ggctactctc | tgtacctcac | 120 |
| anagcctcat | tatcatacct | catttgcatg | tctcacatgn | ctattggggc | atacttttac | 180 |
| agct | | | | | | 184 |

<210> 393
 <211> 476
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature

<222> (1)...(476)
 <223> n = A,T,C or G

<400> 393
 gcagccacca ggcattctgac cctgaggaaa aagggaagcc tggcagcatc aagaaggccg 60
 aggaggagga agaaattgac attgacctga cagcgccaga gacagagaag gccgcccttg 120
 caatccaggg caagttccgg cgattccaga agaggaaaaa ggattccagc tcctgaatgg 180
 ccaggcctcc ccttaaccct tctacttctc ctntgccctc cacagctctg actctcacgt 240
 atctcattcc ttcattccctc tagcctctcc ccaaggcaag cttaaccctt atatatctt 300
 gtctcaggct ctcttaagcc atcacagtag tagaggcaca aggatgcaa ggtgaagact 360
 cttagtggtg gtcactaggc taagggtgga tcagtccatt taggagaaca aaaggttttg 420
 agatgggaaa ttctccctt tgcctaattgc taagggcagg agggggcaag ccctca 476

<210> 394
 <211> 184
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(184)
 <223> n = A,T,C or G

<400> 394
 ccttacagac tcaagactga tgagtaagga cagagtantn ntngcccggg aagaagacc 60
 canactaccc tagaacagag atggcnnacc ttctcctgat cgttcctgng ttgtgccact 120
 gagggagaga ggggtgangac acacanagcc atcagggtan gcnggagacc ctgaggcccc 180
 tctg 184

<210> 395
 <211> 339
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(339)
 <223> n = A,T,C or G

<400> 395
 cctcattcct gacttcagtc tcacgtggga ccggcccttg gtgctgacag catgggggac 60
 tgnactgnag ctggcatgna tanagccanc ctggnttgcc cactggctga aganagcanc 120
 ggngggcgaa gcagananng agngngtggn ttctctctga caatctttt gggccactc 180
 ccacgatgcc agcctccaga agagggaagc tgtgtgggag acggtgtgta caggccccga 240
 ctctggcctt tgctctacgg agctggcgac ctctgtgtgc acaggtgaca tctagaggat 300
 ccggggcggtc ctcgatcagt gntggaaaag aagggtct 339

<210> 396
 <211> 289
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(289)
 <223> n = A,T,C or G

<400> 396
 ggagggatga ccaggcgtgc aaaagctgac gcgaggatct gaaaccagat gaccgggaa 60
 agggccngnc accaaaagtg acctcctttt ttaacccttt atgtcaaaat ataattggc 120
 aatgcaagag tctaccctgt taccogncac tttttgttcc catcctataa aaatattgta 180
 gaaatattgg acagnctccc ttcaggaatt cggatcagag gggggagctg cccacctccc 240
 tcagcgctaa gaaaataaaa cttccatttt taagcttcaa aaaaaaaaa 289

<210> 397
 <211> 264
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(264)
 <223> n = A,T,C or G

<400> 397
 agactgaaggt gttcttngtg nccgacctnt tgcgagactaa nacgagcctc tcaactgcccg 60
 cccctgcgat cagggaaggga gatcctgtct cccgtggaca tcatcgacag gaacaatcac 120
 cataacatgg tgtagatgct gcggcctccg gagcgctttc tctgaagcga ctgcacgttc 180
 ctgctgctct ccgatctcat cagacagtag aatgtaggga aaagcttttg cccgatggat 240
 tttgaaaaca tttaaaaaaa aaaa 264

<210> 398
 <211> 326
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(326)
 <223> n = A,T,C or G

<400> 398
 aatactttta gacctactgg aacctcactg ttataggcta caccttgagg aaaccatcat 60
 attgaaagac attgtcaaag ttcaagaaga aatgaaaggt ctatgaggaa caaaaagtca 120
 aactgtgaat gcattgtgga nggggggnat cttttactct tctattaata tatgnatcat 180
 gtgtcacaat tgataaaagc catgttagca tagggatatt gaaagaagca atgtaccgct 240
 ttctatccca gaactgtgag aaaattgtca gattctatct ttggtagaca ttctgagtat 300
 gataaaagtt tgcaatgaaa aaaaaa 326

<210> 399
 <211> 216
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(216)
 <223> n = A,T,C or G

<400> 399
 tgtgttacc atggagtcan gacacggncc ccggagcgtt nccaaaccaa ncagggtccc 60
 ttgattaaag tcaaagctca cntacaggag gcntgngccg gaggaccaca ggcagggcag 120
 ggaggtattc tgggacttct tgaatagcta ggantcagtc agaacttgaa tttcgacagt 180
 tttgaagacc gtctgtgccc ttcaatcaaa aaaaaa 216

<210> 400
 <211> 244
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(244)
 <223> n = A,T,C or G

<400> 400
 tggccccgc acatggtgcc agctcttatg actgncncct gacttnatca tatccctnaa 60

gatanncaca gtagccttga gcttgtattg cgcanangen ccacanatgt aagatcanat 120
 natgtgacna tgtattnctg agccaacgaa ctgngectat gtggactggg ctgaggggga 180
 gtggactgga ggggataaaag ggggatggcg gagagaggnc agcanttctt tttcctgcac 240
 attg 244

<210> 401
 <211> 124
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(124)
 <223> n = A,T,C or G

<400> 401
 tgagggcatg ttgagtcggc tgcattctagt ngatccaacg agtaggagtg ttggctggta 60
 agctgggcat ccgtgtatct gagtttctta gcaataaagt gaaatgcaat cttaaaaaaa 120
 aaaa 124

<210> 402
 <211> 113
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(113)
 <223> n = A,T,C or G

<400> 402
 agtgggaagct tgtgancatg aggagctnng ancatgnaga gggaagcna acnggagggc 60
 tttntgcccc agnngagaga gatcgcccgg caggatgaagg cctatgagaa gca 113

<210> 403
 <211> 104
 <212> DNA
 <213> Mus musculus

<400> 403
 atacatgcct cacatgtgaa gccagcccc ttagctgaga ccagaattcc aggaaaccac 60
 cctgtctgga aggccaggc tacggagaac cctctgaaag tgaa 104

<210> 404
 <211> 141
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(141)
 <223> n = A,T,C or G

<400> 404
 tgttcccatg aacatgcaga aagaggagnn cgtgagtgtc tgggtccggg accccaggat 60
 tcanaaggag gactttnggc actcttatat cnactatgac natntgcctt cacacnacag 120
 agcagaggag acttgccttg t 141

<210> 405
 <211> 101
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(101)
 <223> n = A,T,C or G

<400> 405
 ttgacccttg catggcagga gaaaattnan tgcttgagtn gttctctgac ctccacatgc 60
 ggtcctgnta catgggntgt ntgcatacac ataaacacac a 101

<210> 406
 <211> 160
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(160)
 <223> n = A,T,C or G

<400> 406
 gcctgaggcc caacctgcct gaggccaaac cggntctctt ccaagatttt ccggagttat 60
 ctctcgagagt tcccactaaa aggttgatct gtctacttca aaagaacttt acttgtttag 120
 ggatgggcct cccctcttct ttataaagtg tgtttgctgg 160

<210> 407
 <211> 185
 <212> DNA
 <213> Mus musculus

<400> 407
 ggaatgcctg aggactctgt cccctctgtt taaagtctcc aggttagtaa gccaggaggg 60
 agcccgccac ggccacctag tcagcaccct tccctgcccg ccatggatca cgatgagcta 120
 ccccgggagg gctgtggggg gggggcaggg ataggtaag gggaggggat ggcaaaaaat 180
 aaaaa 185

<210> 408
 <211> 347
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(347)
 <223> n = A,T,C or G

<400> 408
 aagagatgga ggggcaagtt ctgagtgatg caactgctgc ggantaggag ctaggaacca 60
 gttttacatc aaggaagtta acaccgtgtg taaagaagat gggcagtata gcagtccaca 120
 caagtggcct tggtgaaaag actgccaggt tgagtggcct ggtttggagg aggtgtnttt 180
 nttaacgctt nctccagctg cagtggngct taggattctg ctggtacatg acgcacaatt 240
 ctgaaactca ctcatgactt aagcactgga gaccttcaact ggcagactgg ngctggcgac 300
 gctgggaggc tgnccgctgnt gcactctncc ccaccgcct accacag 347

<210> 409
 <211> 251
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(251)
 <223> n = A,T,C or G

<400> 409
acgattcagg accatnagca ccatnagaag ctcttgctct gtnagcatca ttntctcccag 60
ncctcaaacc ttgtcccttc tgggnaccac ncgagatgcc cctacgcgag aatanncnng 120
ctntnctctg tctctncaag nontgagncc ttngnggggg agaactttat tnncttcagn 180
tggtgtctgn cctccacatg cgtcctgtng catgggtgta tgcatacaca taaacacaca 240
tgcacacggt g 251

<210> 410
<211> 150
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(150)
<223> n = A,T,C or G

<400> 410
tcacagtggg cccttggtatt accccccctt ttttgcatgg nttgagtacg cttatcacaca 60
tattgccaaa nacntntgaa taaagagatg ctcaatatc ataacctgaa ctattacagt 120
tcaaggacat tgcttttcca aaaaaaaaaa 150

<210> 411
<211> 241
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(241)
<223> n = A,T,C or G

<400> 411
ggcccttaat acacacacgt gcttntantt ggtataaata acgtnattgn gcagaccaga 60
aacntgcgac aacttgagg gacttgcagt nggtttcatg gngctgaggg agtgaaaacn 120
tcacccactg ccatgggttt gcaactataag cgcctgcatt agtaatnttt aaaaacatnt 180
ancacagtaa nantttcnaa antcttttct atgcnagctt atctngttag gcattatttt 240
a 241

<210> 412
<211> 117
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(117)
<223> n = A,T,C or G

<400> 412
cctgcaacat cctggccttt tctgcagaaa gaactganng cttinggaaa ctgtaaagct 60
tacctctgng gaaaaacccc aaagcattgt ttcaacacag gtttcccttaa gttaaaa 117

<210> 413
<211> 125
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(125)
<223> n = A,T,C or G

<400> 413
 agtaccgtga agacatggcn agtccaagaa ccacacctac ctacacacta ttngcagatg 60
 accagtgtcc tgtgctgttt ttacaaataa acttgaggca agatcaaaaa aggaaagaaa 120
 aaaaa 125

<210> 414
 <211> 171
 <212> DNA
 <213> Mus musculus

<400> 414
 gaactgagga ccagttccag gtaattgcat ggctgctgca ttcccgtgag gcccctgtga 60
 gcggcatggg aaggcttctc catcaacctc tgcctcccc cagggtgcctg ctcttgatca 120
 aaccaaataca aagcgcaaac aagttccagc gggaaagttt aaaaaaaaaa a 171

<210> 415
 <211> 415
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(415)
 <223> n = A,T,C or G

<400> 415
 aactgagctc ttacatatg gtgctaaaga tgtctactgt canctcanac ctgtctggaa 60
 gtntntncag aagactaatg cgacctgaan ttcctgggga gggtanagtg gctgcagccn 120
 cncctgtgta nccgattnta tatngctgat anattgacta caagcccgaa aanggnataa 180
 nggactgtgg gnncccagggn atggagctga tttcaggnat gnnactacca gctctatcan 240
 catttngac tgcanacgac tctaattgctt tggacttgan tgcattctac ccgccngacc 300
 tttccttatg tatctgaaga gaatnccctt gccnctctg cttgcaaccg ctctgcaanc 360
 tctgatctca ccgaagttnt nggngttcca tattttntct attcccctac aagtt 415

<210> 416
 <211> 356
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(356)
 <223> n = A,T,C or G

<400> 416
 taaaaacatg cccctgaccc tcttgccaaa tgagtntctg ntcattgaggc ccaccaagat 60
 gaaccancca aggaggntc gtgnnctgcc ctgtacgaac antgactgct gacngtgtga 120
 tgagcaagct gagggtnctg aaatgttgct tgccaangnc catgaaggaa gtggntcac 180
 ctggtcaccc canganggtg gcanactggc ttgctgganc atgctnngcc agaattctgt 240
 gancctctcg gaccncttct caggccngga cttattnaac ctancccaag angatattna 300
 nataancccc cantgtcccg agtcttntct ganaatgngt ccaccaacat cttaga 356

<210> 417
 <211> 346
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(346)
 <223> n = A,T,C or G

<400> 417

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| cccggaacca | ccctttggac | tccttgana | agcaaatgga | aaaggcggg | gtggnacaac | 60 |
| ggggntgccc | tatnctggn | gnttgaaatg | atagttagcg | ttgttgccc | atagcctgtc | 120 |
| attggacaca | gtaatgattc | tgggtagaac | acagagcttc | cccattgttg | aaagcttagc | 180 |
| aggatccttg | ctacaagttt | atttacctct | agaaacaagg | tcagtcatgc | agaggaagga | 240 |
| aagtaacctt | ttccgtgcca | gacactgtac | tgagtgtctc | cctgtttgag | ctcctgcagt | 300 |
| ctaattgctt | cttaacactt | attaatcaca | ataggaagct | gggtgt | | 346 |

<210> 418
 <211> 119
 <212> DNA
 <213> Mus musculus

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| tcgggttcaa | acgtttgctg | agagatgccg | tggttaacct | gacgccacaa | tggaacattc | 60 |
| ttcccagggc | gtagaagaaa | ctccgctgta | gagctctgct | gcataaggcc | acacagtgt | 119 |

<210> 419
 <211> 167
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(167)
 <223> n = A,T,C or G

| | | | | | | |
|------------|-------------|------------|------------|------------|------------|-----|
| aactgagagg | ccaacagaac | acgnagagac | attactgcnt | gtgtccatga | ctgggacnng | 60 |
| actctgtncg | gntttccctg | ggaatccacn | agngatcatg | ctcttcnaag | aaccaatgct | 120 |
| atgcaacann | cnccttcacat | ntcgagtga | catcaatgtg | gaatgag | | 167 |

<210> 420
 <211> 313
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(313)
 <223> n = A,T,C or G

| | | | | | | |
|------------|-------------|------------|-------------|------------|------------|-----|
| gaaaagggtc | atgcagnggc | ctgagggtgg | aggnataaccg | ntaagccttn | cacgcgactg | 60 |
| antgngggnt | gaganaaaact | ttcntaatng | gatnntganc | atgccncttn | atctctnnaa | 120 |
| gncttgataa | ngcctannct | ctatntctaa | caggctntga | gtagannacc | tcatgccact | 180 |
| gtccatncat | tgataagagc | atgctacnng | anagcgccat | ccttttgatt | cccttctcca | 240 |
| gctttctctc | ttaactgtat | gnaaacactg | caaatagaaga | acaccctggc | taatnctaag | 300 |
| gtaaaggctc | tga | | | | | 313 |

<210> 421
 <211> 196
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(196)
 <223> n = A,T,C or G

| | | | | | | |
|------------|------------|------------|------------|-------------|------------|-----|
| gagctgctga | gagccgacng | gaagcttntt | gaacgngagc | caactgagaat | ggacacttgg | 60 |
| atnccacttn | acccttggaa | aacacacgat | tgtattoaan | gagggagaa | aagngantgg | 120 |
| tattgatggg | atcttggttt | cagtanttaa | gaaagtcnaa | cgngaattga | ncgagacccc | 180 |

ttgtatgccc aatgct 196

<210> 422
<211> 272
<212> DNA
<213> Mus musculus

<400> 422
aactgagggg ggagggcaag gtttggagac atctgaagcc aagtcctgcg ggccacatga 60
gatcttttgc ccattttccac cctgctgttc agtcctggtt atcactcacg gccagagctc 120
ccgagttacc tttgctgcta tgccagcccc atgcaacaga ctgtccaccc cacggtcagc 180
ctccacaaca cccagcaacc cggtagaaac aaaattctag aagcttataa ttaaggagtc 240
ggatttacgt gtcaataaat tttcagttca ca 272

<210> 423
<211> 459
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(459)
<223> n = A,T,C or G

<400> 423
aactgaggtg gggtctttta ccctatatac ccttggccgg ctaccgggaa gactgcgtct 60
cctgacgatc gtaacgaana tgtaccngtg ctttccttnt ganagtnaan nccgccctaa 120
tatgtgcanc angctaaccg ngnggaanct tgcctgccag aaanaaancg cctgtngtnc 180
tattanggaa agccgngnac taangtctgc ttatgncaaa ngcccagnaa tgtccatttg 240
agatccanga gccacnaaga aggggggcta cttggccaac atggctgac acgtgcctga 300
ggcatgccct ntgacctcac cagngtanca cagaaccatc catacaggcc ttgggcagct 360
ggaaatttac actgntagct cnoecatgtg ctaagttagg aactggattt ggattggctt 420
gggntggact cttattttcca agactggtga gggaaacac 459

<210> 424
<211> 277
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(277)
<223> n = A,T,C or G

<400> 424
acaaatctgt ggtcataaag acagacagtt tnaatgagaa gacactgcaa atgtgctgga 60
agacgcagct gtcctgagag ggcacggngc actgncggtt acaggggtaca agtatntgtg 120
accancgaga cccattagtc cacactgctc gtcccggtgca tttttcctat ttaaggcaaa 180
aaaaatcatn gagactagag tacttttgaa tttctagaag ctcccacctt attctgaaat 240
taaaataaaa cccgtgctgt tgggtgtaaaa aaaaaaa 277

<210> 425
<211> 117
<212> DNA
<213> Mus musculus

<400> 425
gggctgcctg ggctaaatag tggattcaag accagcctgg gctacataag acactgtctc 60
aaacaaacaa cacaaaacat catcattaaa aacaacaaca ggagtgaata aaaaaaa 117

<210> 426
<211> 124
<212> DNA

```

<213> Mus musculus

<400> 426
aacatgagaa agtatagctt ctaccattga gctcaatgca ctgtgtgtga aggcgctggt      60
tgctgctgta gggagagaat acaaatggga caataaaaga ctccgaacca tggaaaaaaa      120
aaaa                                              124

<210> 427
<211> 112
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(112)
<223> n = A,T,C or G

<400> 427
cggaaggcat gccaaacngc ttacgcttcc caaggcacia gatctttccc agcatgggaa      60
agatcctccc tccctccntt nttccacccat acactcaata aaataaaata aa              112

<210> 428
<211> 258
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(258)
<223> n = A,T,C or G

<400> 428
aacatgagtt cggccggtac tccgctctga tcatcggcct ggcatacggc gccaaagcgct      60
acagttacct anacccccnn ncagaggagg ngaggagaat ancagcnnnn gnanagaaga      120
gactanntga nttgnancgg ntngngagag aactggcagg aagctcaaga tgacagcatt      180
ctcaagtga ggcgcagcga gcttgctttt ctctagtcgt tgagaacgaa taaagcttca      240
ttgtgtgaaa aaaaaaaa                                258

<210> 429
<211> 351
<212> DNA
<213> Mus musculus

<400> 429
ggaagagact gtctttgaaa ccaggaatct gagatgatgt tgagatggag atgacaggcc      60
tgcaaggaca agagaaaaca tgtagttctg tgagctctga tgtcaacctt cctggacaga      120
gcctgcacag gccctagggg gcagcataga gacctcattg agactagccc acagactgga      180
gggcccgaag gccaggctga tgtgggctgc tccgtcagcc tgccctcctgt aagggacaag      240
agcatcctct gataaggtgt gatggagcag ggggcctgag gatctctgtg cgccttctctg      300
ctgctttggc aacaataaat gaagagtggc tttgtagctt aaaaaaaaaa a              351

<210> 430
<211> 179
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(179)
<223> n = A,T,C or G

<400> 430
agtggaaagc ctggggctga aaacggtgag gctcagngat gggacaacag cctacngtcc      60

```


agcaggctgn naaangggga gaagctgntt gaagggnaag ngatccagct ggaggacggg 120
accacctgcn nacattccacc angtgacgat acngaaagag tntttctcct ttgaagacg 179

<210> 431
<211> 112
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(112)
<223> n = A,T,C or G

<400> 431
caacagaaac atcctacttg gaaatggctg cnggctcaga acctggaanc nngtagaann 60
tagccctggn gtagntgaga aatccaacng ggtgggccac cagttataca cc 112

<210> 432
<211> 137
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(137)
<223> n = A,T,C or G

<400> 432
tatcaactga caaaagnctg ggtgatatgt tctttctccc agngatgaag ggattntctn 60
ctctagggtt nccctcagac cntgnanaca tctgnttttc atngaccatc ngccccaata 120
aaggacccta actttaa 137

<210> 433
<211> 400
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(400)
<223> n = A,T,C or G

<400> 433
ggctcttgaa tgctgggatt aaaggcattt gccactacca cttggctggt atctcttata 60
tgctggacta gccactgcaa ctgagaatcc ccctccacaa tggcctntct tcaggacctt 120
cagccctgcc acacagtact aaacctcagg tgnctctcat gacttcttca tgctttcaaa 180
accaacacca tctagccgaa tcttacacat taccaagntt ggctggcagc atgagatgca 240
gntttggcca ccttgnatna cagcttttat gtgctgaacn ctggggagat aacccctga 300
agattttacc ntcaggagat gctggccctc ttactgaact aatatttcan gttctagctn 360
acctgcaaca atttgtatcg ntaaagcaat aaagcaaagg 400

<210> 434
<211> 516
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(516)
<223> n = A,T,C or G

<400> 434
gactgagcat tcccgtgggt tggtatggct atcggtgga ccctgggttaa gctggtttac 60

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| tttgaaccga | aggatatcac | ggcagaggaa | gaacaggaag | aagtggagaa | cctgaagagc | 120 |
| atccggaagt | atttaacttc | taacactgcc | tacggcaaaa | ctgggatccg | ggacgtccat | 180 |
| ctggaactga | aaaacctgac | catgtgtggg | cgcaaaggga | acctgcactt | catccgcttc | 240 |
| ccgacctgtg | ccatgcactt | gttcatccag | atgggcagcg | agaagaactt | ctccagcctc | 300 |
| cacaccaccc | tctgtgccac | gggaggtggg | gctttcaagt | ttgaggagga | cttccgaatg | 360 |
| gtaggttggg | cttgcccatc | ttcgaacagc | cagctctctc | atgtgatcat | agtgtgctca | 420 |
| tctcatgcta | agacctggac | cattaacctt | gggacctggg | catgtctgtg | cccnggggtt | 480 |
| cctcttccat | atgataataa | atatatgacc | ctttca | | | 516 |

<210> 435
 <211> 197
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(197)
 <223> n = A,T,C or G

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| <400> 435 | | | | | | |
| tcaccctgag | tgacggatgt | gagataagag | atacatgcgg | antgtgannc | actcatcnca | 60 |
| gttttgcatt | gntntgnntg | ngananatca | catnctctnc | ctcntnatgt | ncctccggag | 120 |
| acggatgtga | gaaaagagtt | acatgcgant | ntgagtcagt | caacacgttt | tgcatgggta | 180 |
| agttaaagaa | ataaaaaa | | | | | 197 |

<210> 436
 <211> 264
 <212> DNA
 <213> Mus musculus

| | | | | | | |
|------------|------------|------------|-------------|------------|------------|-----|
| <400> 436 | | | | | | |
| gtgcatccca | ctcgattggt | tgaccgactt | cttgagcggg | tgagctcctg | ttggaagcct | 60 |
| tgctttatgg | cgctgtccca | gtgagaagcc | gcttttctgg | cattcgccag | cttcgggtca | 120 |
| catgcaacta | cttctcttcc | tgccgtctct | gctgggagtt | tgtgaagttg | tttattctgt | 180 |
| tacagcttgt | ttgactttca | cataggcctt | atagtctaata | acaattgaga | aaaagagaaa | 240 |
| atttatgacc | ttgaaaaaaa | aaaa | | | | 264 |

<210> 437
 <211> 162
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(162)
 <223> n = A,T,C or G

| | | | | | | |
|------------|------------|------------|-------------|------------|------------|-----|
| <400> 437 | | | | | | |
| ctaaaagagc | agcaaagaag | ttacnntgat | tttgagctcc | aggccctgat | gagttttgaa | 60 |
| gacaagtga | ggtacagtgg | gtgacagctg | tgtccttgga | cccagcaaaa | gctaataaag | 120 |
| aaaataattg | gaatttaaaa | tataaatatc | taataaatatc | tg | | 162 |

<210> 438
 <211> 262
 <212> DNA
 <213> Mus musculus

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| <400> 438 | | | | | | |
| gtcgttggtg | ctgccagggc | gtcaataata | aaaagagagc | agcgttgggg | gataatgtcg | 60 |
| acatttccac | tcccaatgac | gtatatgtta | cagaattgga | cggctgaatt | tgaacagatc | 120 |
| ccttcgagaa | ttgagacttc | aggteaactc | cacgcgcttg | gacctgtcgc | tgaccaaaag | 180 |
| attacccaat | tggatctcct | cagcattttc | tttctttaaa | aaattgggtg | ggattaatat | 240 |
| tatttgagaa | tacaaaaaaa | aa | | | | 262 |

<210> 439
 <211> 125
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(125)
 <223> n = A,T,C or G

<400> 439
 aggccagggc ccttgtggga cccagcagct cattcaacat aaaagtatat ttttgaagta 60
 cctaaagtat aataacctca cctattatgc caaaattaaa taatcangaa tttacaaaaa 120
 aaaaa 125

<210> 440
 <211> 101
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(101)
 <223> n = A,T,C or G

<400> 440
 ggacctggac cgctggctgt tccttctttg atcccaggca tgatttcagc ttgtagaata 60
 aatgagaaat gcctgtnggt ttaattaaaa gaaccgcatt g 101

<210> 441
 <211> 423
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(423)
 <223> n = A,T,C or G

<400> 441
 taacaactgg tggagcccag agccctgggc gaggatatgg ctgtgtgcct gaggaccttc 60
 acacaggcac acagtgtctc acctgtcttc ttacggctgg caatgagatg gtgctcctta 120
 caccgtggac cccccgagg gtcttntctca ccaccttcag ccggaaagtg cctgaccgta 180
 gaacttcatg tgtattagtt gctcctgaga agaggaagag ctgttttgat acccgatatct 240
 ttcgaggtgt cagtccatgg tctttggctc cactgagtc aggggtcacag caagcctaaa 300
 caggatgggt ggctagacct gccgaggggc agacctcgaa gctcacagca gataggaagc 360
 tcagagataa gactgaagac aagcttcagt gtacttacat ataataaatt aaatctttaa 420
 aag 423

<210> 442
 <211> 396
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(396)
 <223> n = A,T,C or G

<400> 442
 tctggctgtc ctggaattca ttatgcagag taagatggct tganactcac aagagatcta 60
 actgcctctg nctcttgagt gctganatta aaggtgtgtg acaccatgcc taagtgtccc 120
 aagtttaaac tttccagctt ggaagtaaat gaccaggaaa taatacagtg aggattccag 180

| | | | | | | |
|------------|------------|-------------|------------|-------------|-------------|-----|
| cagagatcac | ctccccaggc | atocctaactc | ccaaagtgag | agataactctc | ctgttatcac | 240 |
| tcaatctcca | tcgacgaagg | agccactota | ccactctggg | aggtgaacaa | cggaacacaga | 300 |
| cacagaagca | gactgcccac | ctgatggggc | agttatgtca | atggatcatg | aacaagttga | 360 |
| gtcacaagat | ggaaccagga | aggcaaaggc | ccctga | | | 396 |

<210> 443
 <211> 217
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(217)
 <223> n = A,T,C or G

| | | | | | | |
|------------|------------|------------|-------------|------------|------------|-----|
| <400> 443 | | | | | | |
| cttgaaggag | tacaggaacc | acccaaccct | gcaggctctnc | ttgtaccggt | cctggagaca | 60 |
| ttcccccaac | atcacctgcc | tgttacaggt | ctgcagcata | gtcaccacct | gggccatgat | 120 |
| tgcatctctc | ctgggaagac | ccatgccctg | agagcagtga | gccacctcag | cttctgtctt | 180 |
| agtctctgga | gatggccctc | gtggctcggt | tgtattt | | | 217 |

<210> 444
 <211> 184
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(184)
 <223> n = A,T,C or G

| | | | | | | |
|------------|------------|------------|------------|------------|-------------|-----|
| <400> 444 | | | | | | |
| tcactgtcgc | cgcccacagt | gacgnenncc | acagaaagca | cacaccgtag | ttgcggacgg | 60 |
| cctgtggtna | agatgtcttt | gccatcccca | caggacggac | ggacnggant | ccacaagggtg | 120 |
| cgcagtngtc | nccgaggccn | gccnnganag | ganccgattc | ctcacaggag | gaaggagcac | 180 |
| gccc | | | | | | 184 |

<210> 445
 <211> 185
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(185)
 <223> n = A,T,C or G

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| <400> 445 | | | | | | |
| ccattgagcc | aaagaaaggc | caccccccca | acagccccca | cacctggata | anagcgccct | 60 |
| gcaagaactt | cttntggaaa | accttctcct | ngtgcaagtn | acccancct | gggcatagca | 120 |
| ccctggccac | cctgngagat | gccaacggag | acctgaataa | agactgtcaa | tcagcaaaaa | 180 |
| aaaaa | | | | | | 185 |

<210> 446
 <211> 300
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(300)
 <223> n = A,T,C or G

<400> 446
 ctgaagagct accatttggg tgctgggatt tgagctcatg acctncnnaa gagnetgnnn 60
 cggngctntt acccnctnaa nnatttcacc agaccnctg atcctccttn tgcgnatnct 120
 gctacctgct ganaggcccg ggagctcttn tggagactat gccctatcct acgtcatcac 180
 ctgcagctgg ttccaggctc caaggatgaa ttggcgggaa tggactttcc cccctttttt 240
 cccccctctt ttctaaagcg tgtctgccat taaaaatttg aaccttgagc aaaaaaaaaa 300

<210> 447
 <211> 152
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(152)
 <223> n = A,T,C or G

<400> 447
 ctgggtgatgt ccctccctgg gacacatcca gaggggtgtg caggagtcca aagaaccang 60
 gactcaggac ctgcgggcag ctgacctctg ctgctgtcac tgcacagaaa tttttaaatg 120
 acttttatta aatccttaca aaacagaaaa aa 152

<210> 448
 <211> 247
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(247)
 <223> n = A,T,C or G

<400> 448
 acgactgggc ttccagtgtgt ccgtggggga gtcagggtca ggcggaccgg aggtctacca 60
 tgacacacgt gtttccgncg ggcacgcata cacncacgtc cctgaccatc ctggttgcga 120
 gttggtgccc ccggnccctc agtgaccccc cccacacttn gttnngagcag nggccctgcc 180
 tcanaatggg cagacctttt aggaaactng gatcanacgn gactcggctg gcacccccact 240
 ggtgccc 247

<210> 449
 <211> 228
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(228)
 <223> n = A,T,C or G

<400> 449
 tgaagagcag ttttgtccaa aaagaacatc atctccagcg gagaaagggc agctctgagc 60
 ctcgaggaga gactncattg tnancctca gactacatac cttggncctna caatgaaaga 120
 atccaatatt gganganca ngaaaggaac tcagnncnc tngcnccagg tcaangngtg 180
 gacctcatag cctttttggt cagngtgtnc ctagggaac ataataac 228

<210> 450
 <211> 136
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(136)

<223> n = A,T,C or G

<400> 450

| | | | | | | |
|-------------|------------|------------|------------|------------|------------|-----|
| agtctacata | ccaagctcca | gnncagccaa | ggctacncag | anaaatcctg | tcttggaata | 60 |
| caaccggnncn | nacaancctc | caaactgagn | aatctgtatt | tagaacgatt | gctcatnttt | 120 |
| atgacaaata | aagtag | | | | | 136 |

<210> 451

<211> 485

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(485)

<223> n = A,T,C or G

<400> 451

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| aactccctgt | ggttggaatg | gcttctctct | ttcattcaga | gggcttctct | ggatcaagcc | 60 |
| aggcgaanaa | gctgagactc | caggcataca | actggttatc | cagggagctg | gaccttcaot | 120 |
| cagacttcca | gctctccacg | cgctgctcac | cgtccctgtc | ccagacagga | aacagtaact | 180 |
| gatgctggaa | cacaggctcg | tgggacccgc | ccactaagga | tctctcagcc | accggcagcc | 240 |
| acagccacgg | aggagctctt | tgtggtcttg | gcttttcaat | caaggtttgt | ggccaaggct | 300 |
| agagaggcag | ctctcacctt | caatgaaagc | atctgggtct | cagtcaagat | tgatctgcac | 360 |
| tcggatggat | tccctgtctg | ccagacaacc | ttggaatcca | ttagggccgg | gatagagcac | 420 |
| gatggaaggg | gaaggcgcta | aggcacgcaa | catgtcacgt | gacaccagca | gtttccgttc | 480 |
| cctct | | | | | | 485 |

<210> 452

<211> 558

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(558)

<223> n = A,T,C or G

<400> 452

| | | | | | | |
|------------|-------------|------------|-------------|------------|------------|-----|
| ctgagagtac | cagtgatggg | gactccagcc | tctgtcgtga | gagagccacc | cctgtggcag | 60 |
| gtttcaaac | ctcagacccg | gggcccgaag | caggcctctg | ccaacatctt | ccaggatgct | 120 |
| gagctggtcc | agatccaggg | cctgttccag | cgcagtgggg | accagctggc | tgaagagcgg | 180 |
| gcccagatca | tctgggagtg | tgcaggggat | caccgtgtag | ctgagggcgt | gaggaggctg | 240 |
| cgcaggaaaa | ggccgcccac | acagaaccac | tgcagccggc | ttagagtggc | ggagcctggt | 300 |
| tctacagcgt | ctgaccccca | ggccagcacc | actgacacgg | cctccagcga | gcagtctggg | 360 |
| aactcccgga | gaacaagtgc | tagagcccc | cggaaactgga | ataagccagg | ccccacaggt | 420 |
| tacctccacc | agatcagaca | ctgactgggt | aaggggtggg | gaggtcctcc | ccaaacactt | 480 |
| gcagggactt | tggccaaaang | gcttatggag | ttgtaaaaaag | gacatntgag | cangcccttt | 540 |
| gtaggtgaaa | aaaaaaag | | | | | 558 |

<210> 453

<211> 221

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(221)

<223> n = A,T,C or G

<400> 453

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| attgtgctca | gcacagaggt | gnttcgtgac | cnngactgta | cttctnaatg | cntgcatgga | 60 |
| tgccagacac | cncgancngn | aagcgtncnt | nagngctnca | gagcttatgn | agtgntaaan | 120 |

| | | | | | | |
|------------|------------|------------|------------|------------|-----------|-----|
| gattctcaag | tggncatctg | acccaccatg | atacagntct | gactgttgct | accaccnta | 180 |
| ggaagaaaac | gctgagtcac | cngaaaccaa | agaaaaacaa | a | | 221 |

<210> 454
 <211> 181
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(181)
 <223> n = A,T,C or G

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| <400> 454 | | | | | | |
| gctgggaatt | aaccttngna | cctgatggaa | naagcggcga | gncaaccaca | acccatcgct | 60 |
| caagcccat | tgctgggcct | ggtgacaacg | catgtcagtc | ctgcctcagc | cccctgaatg | 120 |
| catgtttaca | gatgtgcacc | agagcacctg | actcaagttt | taaacgatca | ttttgagcac | 180 |
| t | | | | | | 181 |

<210> 455
 <211> 457
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(457)
 <223> n = A,T,C or G

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| <400> 455 | | | | | | |
| aacctcagaa | aaaagtcttc | aaggctcgga | aaacaatgag | agcngagcga | tcgccagcag | 60 |
| ctcgatgctg | tgcncagagt | caagggggag | ctgctgagag | ccgacgggaa | gctgctgaac | 120 |
| gggagccatg | agaatggaga | cttggatccc | acttnaccct | tggaaaacac | agattgtntt | 180 |
| caagatcgag | aagaagtgaa | tggtattgat | gggattttgn | tttcagtcag | aagaaagnnc | 240 |
| aaccgggaat | gggaaaagan | gaccccttg | tattgcccac | tggtttgcct | gtnataaaac | 300 |
| aaaaccnnga | agattttgaa | atagtngaag | gctttttgtc | ccccccant | ttttctatan | 360 |
| ttnnatnncc | ntaacanaac | nggggggggg | nggggggggg | ttcnggggcc | ttntnaanng | 420 |
| gttngntgnt | cccccttttt | tttgtctagt | gggggggc | | | 457 |

<210> 456
 <211> 237
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(237)
 <223> n = A,T,C or G

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| <400> 456 | | | | | | |
| gctggcacgg | agcatnctat | ggcatcgtga | gcctgcagct | gatctccggg | gtgngtgctg | 60 |
| agggnacat | cacatacngc | tgttccaccc | agagtgcana | ncnctcactc | tangactcag | 120 |
| gctagaactg | gactgcacag | angaccctcc | cncnangata | aatganactt | anancctn | 180 |
| tttaccantt | gcggatctat | aaaatngnac | ntaactatac | taccaataaa | caaataa | 237 |

<210> 457
 <211> 348
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(348)

<223> n = A,T,C or G

<400> 457

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| tatggcatcc | aaactgngct | nntacaagtg | ccctgtctgc | ttncagnact | nncacngaaa | 60 |
| tgtcaaagtc | caccntgggt | aaacatttct | tgtantccct | agtccgctna | aacaacagta | 120 |
| aaacggttgg | nccntganca | nntgctaaat | aaagaaatat | ntgcgtgncn | nagccttaaa | 180 |
| tttgctatat | cctgtntcaa | tctactgcta | acatagcgtc | ntagagaatn | gnagctaact | 240 |
| ttcaaatatg | nntctaaaat | gaccagaatc | agccttccaa | atgaagaant | agcaacgnct | 300 |
| aatgctgcgn | tgattatctg | ggacagngca | tgacataagt | agggcata | | 348 |

<210> 458

<211> 101

<212> DNA

<213> Mus musculus

<400> 458

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| acgtcccact | gagtcttgcc | cacctctccc | ctgaaacttc | cgcgcttaat | aaaaagtaat | 60 |
| gcgtcttggg | aacacccaag | gttggtcatg | tggcagcata | a | | 101 |

<210> 459

<211> 246

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(246)

<223> n = A,T,C or G

<400> 459

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| gctgtgaaca | gcttaccctt | gatcgatgat | ccgcagaaac | nncaagagag | accttgtctc | 60 |
| agtgacgtgg | aagangaatc | agtgccccnn | aagtngnatc | ctgaccttct | tttgccatag | 120 |
| catgtgtgag | cctgnactca | ccccttccct | taataataat | aaaacaacaa | ctttgtgant | 180 |
| tgngacnnat | nnanncatag | catgngtgag | cctgtactca | ccccttccct | taataataat | 240 |
| aaaaca | | | | | | 246 |

<210> 460

<211> 294

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(294)

<223> n = A,T,C or G

<400> 460

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| gccacactgc | atccgcttcg | gctttttaa | gaaatcacct | gcaactcccg | ccgncggcac | 60 |
| cgaagngcag | aagatgcca | ggtttccgga | gcaacagctc | agngtcact | atctccgccc | 120 |
| cgcggcgcct | ttcccgccaa | aggccgttac | caccgcggag | catggtggga | cacagcttgc | 180 |
| aagataggtt | tcacccaatc | tttttanagc | gccnagctgc | tttcanagag | ggtctacccc | 240 |
| cgaggtggcc | gacgattctg | gactcagtg | ggattaataa | taaccgcttt | aacc | 294 |

<210> 461

<211> 106

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(106)

<223> n = A,T,C or G

<400> 461
 gaaaagcgca gggcccatcg accactgaag acaacgggag ggagctggaa gacggngatg 60
 gnetgganat cantgctgca ctcttcctgn gagacgattg aagcct 106

<210> 462
 <211> 347
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(347)
 <223> n = A,T,C or G

<400> 462
 gagcctttga agaccagata nctaataaac tctagatnca tccatgggtg cntcngntnc 60
 cttcntannn atggttnncat attannnanc gttnggnccn tccngcctcc gagcccagga 120
 tgcaacctgga tgaaaacaaa atcccacgtg actggccctg agctcagatc atcatggcgt 180
 ctcccagtgga gaagggatct tggacgccc aggtccctgg ttttgggccc cgggcgctag 240
 cacgggacct ggtggactcg gtggacgacg ccgagggcct ttacgtggct gttgagcggn 300
 gcctctgtgc aacaccactc gccggnggtg acttgcgcca agtgcgt 347

<210> 463
 <211> 472
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(472)
 <223> n = A,T,C or G

<400> 463
 agcttttgga aagcctctga agggccagga acccgagggt gttctgctga gagtcgacat 60
 catggatggg gagagcagag gagacacga aggccaaagg gagcagcagc agcaagaccc 120
 tcagtcgaca cattgcaggc gcccttcttc cnggttttagc ctactcaga tccagtacct 180
 tacctttgcc ttcatctctg ccttntgctg gacacccggn caccgcgctc cggacaccgc 240
 cggatacggg cagttaatat ccagttctgg tctcgagcct gggcaaatta ctggagcggt 300
 cgttgggtgt cagggctccg ngagactggc cacgcnctaa ttgtctcacc acgccctnca 360
 cacacggtcg cctagatcc tcactactcc accatcggtt ctctggcata tccacatctg 420
 tattgttgac tgaccacacc tcttaagcca tactcctcgt ggatggccac gt 472

<210> 464
 <211> 480
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(480)
 <223> n = A,T,C or G

<400> 464
 agcctcaaat gcagcctgct tgnccacctc cttctccact caggncacaca gctctgcata 60
 cctacacttc tctggntccg gntcactgaa aaaacccaan atccacatgc ccacggactc 120
 nttcccact gactnnatcc cacttcctgt agagttccta aacaatccca anaaagcacc 180
 tccagccaaa aanggacccc ttgatgactt gganaaagac cctccaggng ggnngnccan 240
 aangtgganc tngcctccct gnaagagctc ttctggaaca tggcaagtcc aagccaacag 300
 gctgggaccc canagatttc ctctgggagc tcacaatgct acatcaataa cttanattac 360
 ttactgcaan aaaagaggat gctggttga naatttctcc ntgtccctgc angtcatttc 420
 nccagtgcac ccgggtgaaa ctgtattctt ncctaagcnt caccctttgc cttgcttcct 480

<210> 465

<211> 139
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(139)
 <223> n = A,T,C or G

<400> 465
 ctggaacaag aggggtctca nccctcctt tgtggactta gcattacagt cnctaaatgt 60
 gtggacttgc aacggaaatc anattcaana atcatgttct tgttggacta ctgaaaagct 120
 tgaaaagatt tcatatact 139

<210> 466
 <211> 216
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(216)
 <223> n = A,T,C or G

<400> 466
 aggcctgcat gcttganccg ttgcntccgc cccgcggnag cacnatgtct gnatgccatc 60
 nccccacagc tgganagggc agtgctgnag cagnncctta ttgcatgnag ccactcttan 120
 aattctctca gntgaagtgg tgntttttat tatatataaan gtacactggt gngnncnna 180
 aacactccag aatnagggng tcagatctca ttacag 216

<210> 467
 <211> 277
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(277)
 <223> n = A,T,C or G

<400> 467
 tgtgggggttg ctactgttc ttcttgaagg aggagtgact ggccgccacc ggcacctgga 60
 acccagcacc caggaggtga acccggacgg acctgaggag gatcctgtgt cctgtgtcct 120
 tgggagacta ctactgggg cgagatgacc acagccacca ctttngggga cgccgtcttc 180
 tngctganca tgaccagggg agaggacgcc ctgtntaana gctctggagc catcgtggct 240
 gccatcgtgg tnggtngtna tcatcattgt caccttg 277

<210> 468
 <211> 363
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(363)
 <223> n = A,T,C or G

<400> 468
 tgtgcatgca gagaccacag atgtcatctg cagaaacaac ggtcaccttc nttganacag 60
 agnctctnat tgnccctggag ctgccaatta gncncaactg cagccagcan gccccagagc 120
 ttctcctgtt tctgcctccc tagcactggg gttaaaagtg cagaccacca ctctgcacct 180
 ttatttacat gggtccttgg gatcaagttt aggtccttca ggctccagag gcaggtgcat 240
 taccactgtg tgtgggtggg cctgatgcag ttcttgtgac ccatccccta atgaataaag 300

gagccaatca ctgggcaagt aggagggact tccaggntgg actgaggaag agaggaagca 360
gga 363

<210> 469
<211> 291
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(291)
<223> n = A,T,C or G

<400> 469
cggggctgtc tgttgactct gcccagaact ttttcacccc aggtatctaa atccttgcc 60
caaaggtcac cactctctaa gngagacctt ccctcattgc ctgcctgtaa gatggaatga 120
tcttcctgt gtcaagcttg cctcgtagcc ccttcttcat cctatttctg acttcttagc 180
cgaggaaaaa tacttaagaa aagaattctc attttgtttt ctgctgtttc cctgtaccta 240
gtacaatata ctacacatgg caggaatggt ttttttttaa taaaacattg a 291

<210> 470
<211> 199
<212> DNA
<213> Mus musculus

<400> 470
catacctaac ctatcgaggt tcaagtcccg gttccatagt ttgcaaggaa tgcagatttg 60
aaccaatgac tcaacgtctc cgtgctacag attttgtagc atcaaccag caccgacttc 120
acagagctgt acagagacta aggactgctc catattaaaa cactacatgt tcccgtgtt 180
gttaaactat acaaaaaaa 199

<210> 471
<211> 164
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(164)
<223> n = A,T,C or G

<400> 471
acatgtgaca tccccaccaa cggtctgtggg tctgagcact gaaactcaga gctntctgga 60
ttgaacanat gtgtgttggt actgttgac gtgtggcttg tgattttttg ggggcggggg 120
agttgttttg naaaactatc cccccccca tctctcaaaa aaaa 164

<210> 472
<211> 290
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(290)
<223> n = A,T,C or G

<400> 472
tgaggaaaat tcccaggtat tcatgtaaca gggaattgag gtaactaaga atgtctggca 60
ctgaagaaga cttatgtcac cgcatagaa tagttgtcgg tgtaagtcct gagaacacaa 120
aagaaaaggc ggtgcagttc tgtaaaagtgg ttcattgtagt ggataaacat atactcagtt 180
ttgatccgaa acaagaagaa atcagttttt ttcacagaaa gaaaactacn aattttgata 240
ttactaaaag gcaaaaataaa gatctgaagt ttgtatttga aaaaaaaaaa 290

<210> 473
 <211> 252
 <212> DNA
 <213> Mus musculus

 <220>
 <221> misc_feature
 <222> (1)...(252)
 <223> n = A,T,C or G

 <400> 473
 taagggtcaga ccctatgcat ggggcggtag tataagctgg gacggcntgc tgccaacact 60
 aaggattgga cctngccata tacacangag tncgagntcn aggaggcagt aaganagtac 120
 tgagccctga gatggngatg tnagagaatt gcttcctnna gcctctgagc tgttatattn 180
 ggcnaacaa gggatnactg atgttgnnnc acaatgagct tgnctgcacc naagancctg 240
 gaaaaagaac ag 252

 <210> 474
 <211> 126
 <212> DNA
 <213> Mus musculus

 <220>
 <221> misc_feature
 <222> (1)...(126)
 <223> n = A,T,C or G

 <400> 474
 accaaagtac atattnaagc cttctccagg gaanagccca ggcacacggg ctnaanatga 60
 ngcngncngn annccccctc agagggagaa tgtggtccag caagatcana ctttgcgctg 120
 tctgtg 126

 <210> 475
 <211> 121
 <212> DNA
 <213> Mus musculus

 <220>
 <221> misc_feature
 <222> (1)...(121)
 <223> n = A,T,C or G

 <400> 475
 acatgtacca acaatttata tnaacaaaca aataataaca tnaatnacat aagtgactnn 60
 caagcnanga ctacatagag ataccctagc tcaaaaaaga ccaatagaat acaatggaaa 120
 a 121

 <210> 476
 <211> 322
 <212> DNA
 <213> Mus musculus

 <220>
 <221> misc_feature
 <222> (1)...(322)
 <223> n = A,T,C or G

 <400> 476
 ttttaccatg acacanaact ggcctggagg agctggtggc acggttgagc ctggggccct 60
 gcccacatga tcacccctcg aggggtttgg gagacagagg tgacccgggc ttttggggct 120
 ctggtgtgga tccgttgtga caagtatgca ggagacttgc tgcagcttcc tccagcagtc 180
 caggagctgc ttctcagttt ggtccgagat gctgccggca aggaagacat cattgagtgg 240
 ctcggccatt ttggcatctn tggtaactgc cccaaccag agatcctgat ctgccttgcc 300

cggcagcaga aggaaagcgc cc

322

<210> 477
<211> 413
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(413)
<223> n = A,T,C or G

<400> 477
caggggtgtgg gtgacccatg tctanacgcg ggattcggng agtactnaca gnccttnatcc 60
ttacanangt gggcacatac tatttcttca ggatncatag gaanttnccc ngctccttacc 120
tcaanccttn cctcaattct tttccntaca atacaatgat ttcactataa anantaataa 180
ctnaaaaagc cgtngggngt ncngccccng ggagccggcc aacctggaga gcagaaatgg 240
cagactcaaa tagatcccca agatccaggc ccaagcctcg gggacccagg agaagcaagt 300
cggacagtga cacccttttt gaaacttcac ctagtncctg ggctacnagg agaaccacca 360
ggcagaccac catcacggct gantncacga agggcnccac taatcggaac ccc 413

<210> 478
<211> 462
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(462)
<223> n = A,T,C or G

<400> 478
gctccactgt tgggtgtgctg ggctctccag aaaccaattg cctgatccga ttcattgccc 60
agcagcgaaa cctaaagaag gctgtgctct ctccgttggc acgagagccc cacttcgagg 120
gtagcccaag actgtatcga aatgccagt ttttaagaga gcagaatgtc tgcttttcgg 180
tcagcttttc actccataca ggaaactaag atggccagca gtccctcagc agcagaggca 240
gacggagagt ctaggatata agatttgacc agaaaagaag atcttcttga atatcagcag 300
tctgggttcc ctgtaaactc ctcttcaaag cggaggagaa tatcctccca ggacagccct 360
gacaattatc tnagtggcnc caaagccctt gctgacgaag cgtgtgctgg gggtgccctc 420
acagatcttg ctgagaagtc acctgacatc ggttccgccc ag 462

<210> 479
<211> 112
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(112)
<223> n = A,T,C or G

<400> 479
ctctgacctg ctggcatgct tggnettcgt ggccaacacc ttactctcag ggcatgtcac 60
tctgtgcctt aactcccgtg cagtgggttg cccgagaggg ttccgccttc at 112

<210> 480
<211> 129
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(129)

<223> n = A,T,C or G

<400> 480

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| agccggtttg | gactgactgg | ctgcctncct | cctcctgccc | ctcctcccgc | ttctgcttca | 60 |
| gatttantta | ttatatgtan | gtacnctgnn | ncagtctgga | ggacnacta | nacgagggca | 120 |
| ccacgatct | | | | | | 129 |

<210> 481

<211> 162

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(162)

<223> n = A,T,C or G

<400> 481

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| ggaccctctc | catggcaacg | ggnanctcac | tgagangnga | gtgtancnca | acagcangnt | 60 |
| gcnnatatgn | agncatagct | gatgctccca | ttatattata | tagtgaccga | gaaggcgtgg | 120 |
| aattattacc | catacacnat | nacagaatac | actgggtgct | ta | | 162 |

<210> 482

<211> 339

<212> DNA

<213> Mus musculus

<400> 482

| | | | | | | |
|------------|-------------|-------------|------------|------------|-------------|-----|
| cttactgtcc | ctctgatgcg | gcctaggatg | acctgggagt | gggcttctgc | cctggctggt | 60 |
| ggagaattat | cttgactaag | tgcaaggcag | cccggaatgg | agctgaccag | cacagcagaa | 120 |
| gccaggaagc | gaattccccct | ccttgcccgc | attcttcgct | tcctttcgct | ggaacccttcg | 180 |
| caccaggcct | ggccagagat | ctccgtggaa | aacctctggt | acccaggccc | agagacagtg | 240 |
| aacaactgct | tagatctctg | cattctttcac | ttcccaccat | gagctgtacc | cctgcagtgt | 300 |
| gagccagaat | aaaccttttt | ttcccttcaa | aaaaaaaa | | | 339 |

<210> 483

<211> 107

<212> DNA

<213> Mus musculus

<400> 483

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| caggatgctc | tggtctcatc | cttagcccag | ctttgaacac | actgcttgga | caggcttctc | 60 |
| ctgcctaaga | tttgacaact | gttcagttgc | tgtgattaaa | aaaaaaa | | 107 |

<210> 484

<211> 107

<212> DNA

<213> Mus musculus

<400> 484

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| caggatgctc | tggtctcatc | cttagcccag | ctttgaacac | actgcttgga | caggcttctc | 60 |
| ctgcctaaga | tttgacaact | gttcagttgc | tgtgattaaa | aaaaaaa | | 107 |

<210> 485

<211> 107

<212> DNA

<213> Mus musculus

<400> 485

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| caggatgctc | tggtctcatc | cttagcccag | ctttgaacac | actgcttgga | caggcttctc | 60 |
| ctgcctaaga | tttgacaact | gttcagttgc | tgtgattaaa | aaaaaaa | | 107 |

<210> 486

<211> 235
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(235)
 <223> n = A,T,C or G

<400> 486
 atcacccctca actatcaggn tcgggggtgct aggtttcctg ancactgnag atnangctgn 60
 caaggggcaac tatgggctcc ttgatcaaat ccaggccctt cgctgggtga gtgagaatat 120
 tgctttcttt ggaggagatc cccgtagaat tactgtcttt ggctctggca tcggtgcac 180
 ctgtgtcagt ctctttacac tgtctcatca ttctgagggg actcatggag cctgg 235

<210> 487
 <211> 101
 <212> DNA
 <213> Mus musculus

<400> 487
 ccacccaact tggaaatatg agtcgtctac agcctctgct ctagtggcat aaatgctgtt 60
 gtgtgcacaa gcaataaaat cacctttgag taaaaaaaaa a 101

<210> 488
 <211> 145
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(145)
 <223> n = A,T,C or G

<400> 488
 cccgtcacac accccgattt cgaaccaagc actgaagtga gaaacatttg tttttaaaca 60
 acntgctcta atagtcttac atttaaaaaa taagacgatg ctctctatta aacttgctat 120
 tataatatag ataattaaaa aaaaa 145

<210> 489
 <211> 175
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(175)
 <223> n = A,T,C or G

<400> 489
 ggttatctcc ctttccacat ggggagcagg tcagacttga gacttcatct ctttggtttt 60
 gcacgatata ccngtgatga acctcaacat aaaatactgg gtttggttaa tccccaggac 120
 acanananaa gagggggggg gtttacnttn agggaatccc cgggggggcc atctg 175

<210> 490
 <211> 401
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(401)
 <223> n = A,T,C or G

<400> 490
gagccctgaa gttgggattg ggncctgcang tcaatcagac gctgcggnn ntnattgata 60
tccaagnaag cagagaatgt gaggnccctcg ntagctccat gagtgaaant cttccaggac 120
tctgtataaa gcgtagtac ttctanaaga aaagactggc cacaagcctc tacaccatcc 180
cagccagcat ctgcaccaag tgactctggt ctctaatatg ctactttaac attcacagtg 240
ctggccattt aatacacaac atgtgtatct tcngaacaaa aanactatac accgtgncca 300
gccagcntct gcaccaagtg actctggtct ctaatatgct actttaacat tcacagtgtc 360
ggccatttaa tacacaacat gtgtatcttc aaaaaaaaaa a 401

<210> 491
<211> 120
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(120)
<223> n = A,T,C or G

<400> 491
ggagagctac cctctnanng gccgganccc tactcaganc gttangacta tcctnanang 60
tgcgatctca cctgattaat gagcccnaca ccttttgtcc ancgcaatga ggatgcttca 120

<210> 492
<211> 194
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(194)
<223> n = A,T,C or G

<400> 492
gaaataacac tcaggagcga ccagggactg agcgagtgga gttgaccgga gcaagangag 60
gncctaaaaa ttcaatnncc ancaaccaca tgaaggctca caancatctg tacagntaca 120
agtgtactca catncataaa ataatgaata aataaatatt tagaatgata tcgngaaata 180
aaggtcattt aatt 194

<210> 493
<211> 118
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(118)
<223> n = A,T,C or G

<400> 493
catcggtgac ctgccaaagga gtgaccataa aggaannacg aacttgnent gtttgggcat 60
taaagaaaac gtggttttaa naatganact nttacctggc ctcttccaaa acgacata 118

<210> 494
<211> 255
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(255)
<223> n = A,T,C or G

<400> 494
gattccaatg gagggagatg cccacntgag agatgggagc ngatcaaaaag ccccatctct 60
ctggattttc tacacaacca gtatgaagac aaaaaggaag atctgaggct ctcgaggctg 120
ggtgtggtgt tgcacaccag tacttgggat gcagaggcag gtgaatctct gtgagttcaa 180
ggtcagcctg gttacatagg gagtttcagg acaatcagga ctccatagag agactcgggt 240
tcaaaaacaa aacaa 255

<210> 495
<211> 267
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(267)
<223> n = A,T,C or G

<400> 495
taacgttagc cttacggctn gaaattnacc ggcanctgct gtgcatctgg gccttgcttt 60
gctccagctn gtcaganccg aagnccgaga aagtgnntca nancggncng atgggcagcc 120
angcncgtgn catcacaan actcacacac ngacttcaag anagcctttg ggtcatcgct 180
cccttttctg tcctttttgt gcatttttagg acaccgctgt ggtctgtcca agctgttctc 240
aaaacctgtg aggtaacaga aaaaaaa 267

<210> 496
<211> 373
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(373)
<223> n = A,T,C or G

<400> 496
aacacaggct ttgcttcaac atgagcaaag tctctgcgca ttcaacccca aagggtctgac 60
ctaccttgcc cagccgacag ccgctgaggg agtagctgga ctcagagagt gctgctccag 120
tgcttttgac atcttgtcta acaaggcacc caggcttccc cgtgggcggg ggcggggcgg 180
ngggcagtga actttgatga ggggctgtgg aacacagact tctgaactag actgcttggn 240
cttcaactgct anctctaaca tngngctgctg catanagaga gttanacccc tgcctctnna 300
tcatactgaa natgactgnt gaaagagana atgaaaaant acctggttaa aaagagaata 360
aacactaaaa acc 373

<210> 497
<211> 145
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(145)
<223> n = A,T,C or G

<400> 497
gcctggagga ggtgcagcgc actgcctaca cctntgagag ngggntgggg cctgcaaccc 60
aggccctttc caaganatct ggcntggcct gcaaggcatc tgcccacccc ttaacagcat 120
cctgcccngt tttctttgccc tgttg 145

<210> 498
<211> 205
<212> DNA
<213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(205)
 <223> n = A,T,C or G

<400> 498
 tcaacggcca tgtccgattt gacctgcccc cgcanggctc tgtcctggcc cggaatgttt 60
 ncacccgggtc ctgtccctcc cngcactage cctgctcgcn ganctgngag gaagaanagg 120
 acagggtgt accgaccgga aaagggggac ctggaagagc cgcccgcccc taaaaatctn 180
 ctaagaagaa aagcaggggg gagac 205

<210> 499
 <211> 379
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(379)
 <223> n = A,T,C or G

<400> 499
 ccctcctgga gacagatgga agctccttgg gtcgacagat tacagcttct ggaacccccct 60
 actcccttca actccgagat ggacacccac tgtccaggga gaggatgcct ggaaataaca 120
 gctgggatct acagtggcca aagagttgtc tccgtcttgc tacatcgaca aactggngct 180
 cctgagttag gattgngccc tgggatggng gattcagttc nttcatttat agttggaaga 240
 agantnaaga ggatgtagng tgtccntntt tntattccat gcncagtgcn aagagngact 300
 gnaccctcca aanggangtn ccgtgatggn ncttcnaatg cntgcccgca ngccgatgat 360
 caaccctgca ctccaaaag 379

<210> 500
 <211> 113
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(113)
 <223> n = A,T,C or G

<400> 500
 atctcacgta ccagatgcta acanaggang ggncctgangc agcctggctg ccacaggctg 60
 canaaaggct cccgatggnc atnagaccat atngaccgac ccagaggcca ccg 113

<210> 501
 <211> 147
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(147)
 <223> n = A,T,C or G

<400> 501
 catccaacgt gtgatnagcc catntctgtc canctggggg aggcactttg tgctgnncac 60
 canntcaacc tgcttaangn tgatgacatc actgaaactn tagngnatgg gccngcctct 120
 gtaaaatcga tcgagagggc aaaccac 147

<210> 502
 <211> 169
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(169)
 <223> n = A,T,C or G

<400> 502
 aataattgtc tccccgcctg gccaatcagc cctcttttcg gcaataactnc angctacctc 60
 agagcatcga actccaagca cttnacanta ctgggtttgng gantcncana acnacccaaa 120
 gancagcccc natnantncc ttgtnctgan ggggggatccc gcatacatc 169

<210> 503
 <211> 213
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(213)
 <223> n = A,T,C or G

<400> 503
 ctttttaaac agactganca ccgngtgctt ctcgctcaag atgatctgat gtctgaagtg 60
 gactctcact aaccatgatg gcgacacaga cgctaagtat agacagctat caagatggac 120
 agcaaagcat ctgagttcag ttcccagaat ccctggcagc ttacaactgc ccgtaactcc 180
 agctcatata tatgtaaatc aaaataaaat aaa 213

<210> 504
 <211> 176
 <212> DNA
 <213> Mus musculus

<400> 504
 ccctgacgat ttacaggaga tacaggaact tattaatgta atgagacaaa ctgggtttcat 60
 tttcctacaa aggaagaaag gattgtagct aactgtgat cttaagtagg aaatgtcctt 120
 gtgccagagg ttcaaaggaa gcaccagcca tcgtttaatg agctccgctc gagcca 176

<210> 505
 <211> 103
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(103)
 <223> n = A,T,C or G

<400> 505
 aagcttcacg ggtaatgacc caccttggag aatgggaaaag ctttatnaag ngggtagang 60
 agaattttcc tgacactaaa gaataccttg atgacattaa aaa 103

<210> 506
 <211> 380
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(380)
 <223> n = A,T,C or G

<400> 506
 tcctcatgcg ggtgaagtat cttttctttt cctggctggg ggtttttgtc ggaagctgga 60
 tcatntatgt gcagtattca acctatacag agctatgcag agggaaggac tgtaagaaaa 120

| | | | | | | |
|------------|-------------|------------|------------|-------------|------------|-----|
| tcatatgtga | caaataacaag | accggagtta | ttgaccggac | ctgcatgcaa | cagcctctgt | 180 |
| gtcacagaaa | cactgtactt | tggaaaatgt | ctgtccaaca | ngcccagcaa | ccagangtgt | 240 |
| ttagnagttn | ttgatnntct | accannngat | gctnanngtn | nnntgggnaca | agctnttcat | 300 |
| nttgncntnn | tanntgnnn | ggatncnnta | nctgnagtat | cagctatatg | atanaccgac | 360 |
| caggggaact | actgctctta | | | | | 380 |

<210> 507
 <211> 186
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(186)
 <223> n = A,T,C or G

| | | | | | | |
|------------|-------------|------------|------------|------------|------------|-----|
| <400> 507 | | | | | | |
| aatttgagca | ctctgtggct | ggctgactta | taaattgacc | tgatangtag | gtccttggac | 60 |
| tgngatgaaa | gaggcgacact | gagacactaa | nnctnnatgg | ncttgggctc | cccgtccggg | 120 |
| cggnntttc | tcngagacag | tagtgaanat | tggggtgctt | ttacaaagct | ctatagccac | 180 |
| catctg | | | | | | 186 |

<210> 508
 <211> 438
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(438)
 <223> n = A,T,C or G

| | | | | | | |
|------------|-------------|-------------|-------------|------------|------------|-----|
| <400> 508 | | | | | | |
| gactgagatt | tgcactgggt | agagtctact | gtctgggtctc | cttggtttct | ctagtccaga | 60 |
| ggatgggcaa | cccacacgga | gatacaagac | catttgaaag | atgcctgatt | gaaagattgg | 120 |
| attgagctgc | cgattcctgt | gagctgtact | gctgatgtcc | tgacaatgca | gattggattt | 180 |
| gtcccaaaga | actattttcta | aacagggttct | tctttgccct | attaatcttt | ccttcccact | 240 |
| acctctggtg | tggngggcta | gaagggacat | taaaacattt | aagaacaaca | accctcgaac | 300 |
| tgtgaggctg | tcagcttcag | acaagagaga | ctatttactt | aaatggccaa | tttttgttta | 360 |
| aaatggccac | tcaaattaaa | aggaaaagtg | aggatctgga | gagaggctca | ncanttaana | 420 |
| acactgactg | atcttcca | | | | | 438 |

<210> 509
 <211> 239
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(239)
 <223> n = A,T,C or G

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| <400> 509 | | | | | | |
| gactgagggg | cccctctgct | cactgaganc | ctggactttg | aagagncaag | nncnacttng | 60 |
| ttgccaggct | cctctaactg | ccnaaggat | gaccttatcc | atctggccag | tncttcaatg | 120 |
| ancacttnca | ccnaatanat | ggaattcnca | nccaacagat | ntttcccca | tgatccctca | 180 |
| cctggcggat | tgtctcatat | agnaagacat | cgtaattcca | cctcactgga | gacacagtc | 239 |

<210> 510
 <211> 170
 <212> DNA
 <213> Mus musculus

```

<220>
<221> misc_feature
<222> (1)...(170)
<223> n = A,T,C or G

<400> 510
ctcaggcctg ctgtcaaaac acaccaatgt ctttgtcagc attcaggagg cagaggcagg      60
cagatcagct gtgagtttgt ggncagcctg gtatctacct caagttccag gtcattcaaa    120
gctacataat gagaccctga tcaaacgaaa tgaaaggaaa caaaaaacaa                170

<210> 511
<211> 305
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(305)
<223> n = A,T,C or G

<400> 511
atccccatct tgaatcagag cagctgttga ccaaccacag agcctctgga agtcaggcct      60
atcagcattc ctgcatggaa gantgaggaa ggctcctncc agaagctgta tcaccagtga    120
atgatgactg ggaanaaanat tggttgganc aaaagggtgc ntttgatccn ccaaggccct    180
taaaattcca caaaaagggtg gaatttnntt ttgcttaaaa aaaanggggn gggaaatttt    240
ttnaaaaaag ggtttcccc cccntgggga aaggttcccg gaaaaaaaaac cccttttttc    300
cccgg                                              305

<210> 512
<211> 297
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(297)
<223> n = A,T,C or G

<400> 512
tggcacagcc tgatanaccg nnaganttca nactgttgn atgacaatat cacacancaa      60
agtggatgatn ggctcagccc tcagagacct ggcancatnn aacactattn gtggtnggaa    120
ncccacacnc tcccaacacn catttttgtt cacagaacca gacgtntgac tctnacctt    180
gggctngetg gaccgccttt agaanaagtgg tagcctagtg tgnggtcccg atcagaccca    240
tgctgatttn tgcgctttng gatgncctgtc cattttacct gacattttaa aggcaca      297

<210> 513
<211> 414
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(414)
<223> n = A,T,C or G

<400> 513
gcaggcatat tgtgtaacag tntgtanact gaaaggcctg ggggctatgg agagagacnc      60
cggaaggctcn gccagctcc ggtcagcaga cangtctttg tgcgtncccc ttggaagaga    120
nggaggagcg aattgacaca ggatctcatg tgcaacantc tancttcaaa cttgctatgt    180
ancccaagat ggcgacctcc tgatactcct tccagttccc aaatgtnggg gtttcacgca    240
agcaccgtgc aggcacagac atcatacatc tgctacccag gagactgacc tcanaacagg    300
acggagacaa aaggttctcc aaggaaagtt ccagcagagg gaggaggcca catcatctca    360
gaatcatcct aggagaacan caacgcattn catgtcctgc ttcagaatgc taac          414

```

<210> 514
 <211> 172
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(172)
 <223> n = A,T,C or G

<400> 514
 ttttattccc ccatgctggg catggaggaa aggccttgct atgccacang gnggngngga 60
 gncgncctca cattgggcat tntaagatgg nactgacngc tgggttctaa ggggtaaaca 120
 tagtctgcnc acatgcaggg gcaggtnctc caccatgtgt tctgcctttc cc 172

<210> 515
 <211> 279
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(279)
 <223> n = A,T,C or G

<400> 515
 gcgcgcacaac ttacacaactt ccctntcccg tcacaggggn tctatntncc ccgcengttt 60
 ggcggaagga tncgcgcgcgc ggnggcggan ncgngctnan ccgtctncgc ccgggctncg 120
 ncccaccccc accccacagg nccagagggt nacaagnnnn taagctttng ataatngaa 180
 gctccaggta nagaggatgc ctgcccgtga gcacattaca gctnttgctg tttctggtgt 240
 atgtaatat taaggttgaa aaaataaatc tcaaaagca 279

<210> 516
 <211> 363
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(363)
 <223> n = A,T,C or G

<400> 516
 gactgagatg gataacgacc agccgcctgt ggtgactgcc accctgctgg tgcccccttca 60
 gaacggnagc tgcncngaag cagntgaggc cctgctgccc catggcctga tgggattgca 120
 tgaggagcac agntggatga gcaacaggac agagcttcat nacgagctga ncncctggaga 180
 ggtgtncacc gacagcatct tctttgncgc tttgnggtng ntntccatct ttggcaantn 240
 cntngtatgt ctggncatnc accgcatccg gaggactcag nccaccacca nctacttca 300
 ggngagcatg gcgngtgntg accttctcat cagctgtagn cagnacnccg attgtcgtgc 360
 tgc 363

<210> 517
 <211> 152
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(152)
 <223> n = A,T,C or G

<400> 517
 acatcctatg tggatggggg ccanccttaga acaccttagn atgttnagga tatngctttt 60

| | | | | | | |
|------------|------------|------------|-----------|------------|------------|-----|
| tagaagcaca | gttntatata | aagggtccta | taagnggcc | anatagnana | tattantact | 120 |
| gnctttggtt | gtgcaactat | gttgcttttg | gg | | | 152 |

<210> 518
 <211> 351
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(351)
 <223> n = A,T,C or G

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| <400> 518 | | | | | | |
| actgtatgat | tactccgtgn | nnnngtcaga | ggatnggctg | aacaggttga | ataaggaggt | 60 |
| aacaacaaca | gaagcggtag | agactacagc | ctcttcatac | agtcttcata | caagaactta | 120 |
| tggaccctgn | gaatcctgta | accacgaaac | cagtgaccac | agaaccagtg | accacagaac | 180 |
| cagtgaccac | agaaccacag | agtccaaatc | agaatgatgc | catgtccacg | ctgcagagtc | 240 |
| ctgtgtcctg | ctttctgtta | tnnaccctcc | ttcaaggagg | ggtacatttt | atgtagaagg | 300 |
| aagagggcan | cccctggcct | tggtggggng | ctataaagta | attcttacca | g | 351 |

<210> 519
 <211> 358
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(358)
 <223> n = A,T,C or G

| | | | | | | |
|------------|------------|--------------|------------|-------------|------------|-----|
| <400> 519 | | | | | | |
| gtgattcctg | gagatatctg | cgtggaaaag | cctgaccac | agtcctgtgt | ctctagccac | 60 |
| tggcacctga | aggattccct | ggaacttttg | ccaaggggtg | gctgaggggtg | tgactogtac | 120 |
| tgggcttcca | agagccacca | anctggaggg | gccagggaca | acataaggaa | gcagtaacat | 180 |
| cgtnntgnga | tgtcacctac | aaaaaaaaatgn | cacaanccac | annanctgct | gttntggaga | 240 |
| tctgngcaac | atctgnetgg | nggaagctnc | gtnaccnct | tgtgcatctt | ggctgctntg | 300 |
| ttaccannct | gncctggctc | ttgccaggac | tgtacanctg | naggggtggga | ccgagggc | 358 |

<210> 520
 <211> 448
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(448)
 <223> n = A,T,C or G

| | | | | | | |
|-------------|------------|-------------|------------|-------------|------------|-----|
| <400> 520 | | | | | | |
| gagttgctga | actccaanta | ctgttgaggc | taccntggn | annaacatnc | acggncgcgg | 60 |
| ggggnngngc | ttcttacaan | aagccctgcn | ttctgntaaa | ggctgggctag | tagtcctgct | 120 |
| gtacaaatag | aaaattaaag | anctcttaca | gggagggcgg | tccctcagaa | aataataana | 180 |
| catacaagaa | atatatatcc | ccanctgtaca | ttcaagtcct | atggngggng | ggctntntct | 240 |
| gcattgcacca | ttccacaggc | tcacttntga | tggggcaccc | tgcatctcatc | nccactact | 300 |
| ccctgttntct | nttctggnac | cccaancatg | aactgganct | cccacatctc | acagtganng | 360 |
| ctggaccacag | tccaccggg | acataaagct | gcaaanagct | accattctat | gnaccngtn | 420 |
| gatgaactga | tcaagccac | cggctctag | | | | 448 |

<210> 521
 <211> 183
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(183)
 <223> n = A,T,C or G

<400> 521
 actgaggtat gaactgctag agaaataaaag ttctgccaaa atattgcata tactagtatc 60
 ttgtaacatg ctttcttgaa agattttggg gctttanagg gtntcacct gtgctacagg 120
 ggactgggaa aaagtggaaa taaagtgatt gtatttttta atcatcaccg tataaaaaaa 180
 aaa 183

<210> 522
 <211> 110
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(110)
 <223> n = A,T,C or G

<400> 522
 catgttttat ttgacaattc ctgcggcgtn taaagtgaan gtncatannc ccctgngccc 60
 gcgctcggtc actcagactc acatagnntt ggctgctggc tgcgttccca 110

<210> 523
 <211> 201
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(201)
 <223> n = A,T,C or G

<400> 523
 atgcatgact acagcnagcg cannnccnag gnnaggang ccgaggnta cgcagttcct 60
 tcacangtnt gnatnnattg cctacttgtt gccannctgt acaagtcttt gtccttgggc 120
 tcctgctaac agatttttaa atgtaaatcg acaactgatg ggtgaatgtg aatttgctac 180
 tgtgaataaa tatagccagt a 201

<210> 524
 <211> 128
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(128)
 <223> n = A,T,C or G

<400> 524
 cagctggctc caaagggttg nggntcatt catnnctctg acctcactgn ctgaataaat 60
 gaataaaatt ccaaataagc atncttgctc tgacccccgg cctaaaancg gngatcctgg 120
 tggggctg 128

<210> 525
 <211> 377
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature

<222> (1)...(377)
 <223> n = A,T,C or G

<400> 525
 aggggtctgct catccctgag tcagcagaag cgaccggcat cagccagaat accaggagaa 60
 gttctttgat gcgtttctct ctatgaagtg aagaccagcg aagcattgta cagtgtatca 120
 atgcaagagc tgtctcccca cagttngtgg gggtccatth atattctttc taaacatcac 180
 aagccctctc aagtgtctgc agcaaaacat cacacagccc tctcagaaga cagcgtccag 240
 gaaaacatca cacgatacaa gggagttnge taaaganacc agaattttcc cacttccatc 300
 cagaggcagg tggatcttct gtgagttcaa gaccagnctg ttctacatag canggtttca 360
 agctaggtag ggttaca 377

<210> 526
 <211> 140
 <212> DNA
 <213> Mus musculus

<400> 526
 actcgggcac cgttctgaca tttaatgtgg aattttacatg atccctcaca tcccatccca 60
 cggttcaccc acatgaagat tcatccaagg ggaaaaccag agttcttggg agcccgagtc 120
 caaaacccaa agaaaaaaaaa 140

<210> 527
 <211> 248
 <212> DNA
 <213> Mus musculus

<400> 527
 agaactgagg tctgcctggg cttatgaaga caaagccccc caagaccaat gagcagatgc 60
 cccagcagtt ggccaggatc atctgttgaa caccctctca ggtactccac ccaccagtgg 120
 ccacagttaa gctctggaat gtgctcagga tgatggacaa caaggactta gaagccgaaa 180
 tacacccctt gaagaatgag gacaagaaat cacaggaaaa cccaggaaaag ccccgtaaa 240
 aaaaaaaa 248

<210> 528
 <211> 121
 <212> DNA
 <213> Mus musculus

<400> 528
 ggtgcatggg cgtgactggg ccaaaattht cgaaacagga agagtaccct cagcaaatct 60
 gagcacattg ggttgacaat cttctcgcag aggcagggtg atcaacctgt ccttcatgcc 120
 a 121

<210> 529
 <211> 281
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(281)
 <223> n = A,T,C or G

<400> 529
 tgaacttgaa gcttgagtta ttganatcag gggcnaacat gctgnaccca acgagtgaag 60
 gggaccttht tgaccaagaa aacatggagg agatctccca actcgttcc ctggagatgt 120
 ctgggggatg tagtcgcca taaaaactca accagtcgtc ctagaaaaac ccagctaccc 180
 agactccggg tacgttacgg nagcgaacat tnttcagggt attcggatcc aaagngcgcc 240
 agacaaagtc ataataaatt acggaagtga acccctgcaa c 281

<210> 530
 <211> 101

```

<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(101)
<223> n = A,T,C or G

<400> 530
caggttctga acagganctt tgacgagcgg cantcaaaga gttaatgctt ctggcctagg      60
agatggcgctc nncagatntt nagancagca gctcttcaca t                             101

<210> 531
<211> 177
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(177)
<223> n = A,T,C or G

<400> 531
tcttgcgctt tgacgacgga gggctactac aggcagnttc tcttgagtca tatgacnatt      60
cttctttcct gccntggaaa ccagtgaact gntnttcctg nnctatgnan tatgaacngt      120
atnacngtcn gtgnagttat ctgcatgaac ctntactag aattaccttt ttagagt          177

<210> 532
<211> 367
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(367)
<223> n = A,T,C or G

<400> 532
agtgggggtct ttcatactga gccctggaan aggacaaaat cgctcaggag agactataag      60
gtacaatgtg gacattctca gccttaagat gtggaaatth agccagagct cacagcatgc      120
cgtggagggtt gccgacagga caccaactct gcagactgtg tcttctcaga aagccgcgac      180
cagctctgaa aatcaaacc tcttcagctt gtgtcaccta cggaacggac agccagtcag      240
ataaagaaaa caagagaacg gtggaaaagc tcagtgcatt ttcagttgac attagaaaaa      300
tccgcaggct gaaaggatgg ggtgcttcta gaggaagaaa cctacgttga agagattgca      360
aatattt                                           367

<210> 533
<211> 102
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(102)
<223> n = A,T,C or G

<400> 533
ctcctgtttc cagtgtgatc aatcaccaat acaaaggagt tcatgtgaca nctncgccac      60
ttttaatatg aagcacttat tgaattataa aaaaagaagc tc                             102

<210> 534
<211> 212
<212> DNA

```

```

<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(212)
<223> n = A,T,C or G

<400> 534
ttctagtgcc aatcaggaga gctgaccggg taccaatttc tttcaaggtg ctcccaggtg      60
accatgaata tccaaaatgt agatcaaaga gaacgtcgta cgagtggtag atccctaaag      120
gggtcttaaa gacgggctgg atgaataagc acctgaacct ggtgccggcg ctggtggtcg      180
ngttctatga gctggactgg gacgagcctc ag                                212

<210> 535
<211> 337
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(337)
<223> n = A,T,C or G

<400> 535
ctgtcaatag ctgcttggtg agggggccagc acttctggac ctctgnctgc ggcctgggac      60
acagagctta tatnangntt ncaaaancag atgtgatgga ctagagagat gggtcatgcc      120
actaagagag atnnactgcc ctacgagaan accanagata tctntgttnt cagcacccat      180
gntggacatc ttaaaaccat ctctaaatcc ggctctaggt gatccaatgt cttcttccca      240
gactccaagg gcacctgtac tcaagtgcac aaaccacat tttaaaaaaa aatatgtata      300
ttaaaatata ataaaaataa tctcaaaaaa aacaaaa                                337

<210> 536
<211> 255
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(255)
<223> n = A,T,C or G

<400> 536
tactatggga agaccantg aatcnngggt ggggcctttc cctggactgn ctgangagcg      60
aagaaagcac tctgagcncc ncntncnnag agaggctgcg gntcgggncn ctcatgagct      120
gcacgggaat gccagangag gngggccctt acctocagcg gcccgagagc ccaaagagat      180
gagcctccat cccctntggn gtccgccatt attgattaca cnttgccctt ncacctttta      240
cctacttgaa gcaga                                255

<210> 537
<211> 286
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(286)
<223> n = A,T,C or G

<400> 537
gactgagaga gccgagtnnt gtcnccacag ccattggcag nggcacttgt atgccctgn      60
caagcngtct atcctgaggt ggaggangnn nccctngngt tctggctggt aaccagcaca      120
gtatcncctt taagcgttcc aganggantt tganancctt tcctaantca aaggtggaat      180
atntggggat ntgaanaant agagaatgcn aagcgctgac ttaacgagat gccacgtan      240

```

tccggggatg ccacnctnac natatttccc caaagatgga ggcctt

286

<210> 538

<211> 266

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(266)

<223> n = A,T,C or G

<400> 538

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| gactgagatg | ctaagccgat | ggttattcca | tcancacctg | cccaccagta | atggaactca | 60 |
| ccgaagcata | cagccgtcct | ctnttgntca | tggccagggg | ncangacgca | gggacaacgc | 120 |
| ctgntgncag | atgccgnntt | nnggaaaccn | agcncctgcc | agaggantgg | actccgtgca | 180 |
| tcaggatgag | ancaaagaga | acngactggg | actggccatg | caccnnggng | tcntcaaaac | 240 |
| antaggagag | ggcagataaa | tccttg | | | | 266 |

<210> 539

<211> 498

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(498)

<223> n = A,T,C or G

<400> 539

| | | | | | | |
|-------------|-------------|------------|------------|------------|------------|-----|
| gacgtctggg | gagctcctgc | attaagtcag | actgaggngg | gnncttncat | ganncggtnc | 60 |
| tgaacnnnnn | ggngacgcc | ntnccatggc | ctgagctgna | ntnantacct | gncagatacc | 120 |
| tatnaattca | tttattncac | cganaanata | tctacctaga | ggatctagat | ntcgtaccat | 180 |
| ggcataangc | ggncctgcact | tggtattagg | aagaataaan | agctctgcct | tancaggtgt | 240 |
| tcaacattaa | tantacanan | aangcttagg | cnncaagacc | ngttacctct | cccaggaagc | 300 |
| atgcatgcag | cactgctctg | gtaagcagat | gcctcctttc | ctgaccccg | gcctaaaagc | 360 |
| gggtgatcctg | gtggggctgt | tcctcatggt | tctgatcctc | ctcctgggaa | cctctatggt | 420 |
| ctgcctcatc | cgtgtggttc | gcanaaagca | ggagcgtgcg | ctgcgcactg | tttgagcac | 480 |
| tgcgatgac | aaggagca | | | | | 498 |

<210> 540

<211> 270

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(270)

<223> n = A,T,C or G

<400> 540

| | | | | | | |
|------------|------------|------------|------------|------------|-------------|-----|
| gactgagtcg | ttctgccant | ctttaantgt | ctganttacc | ttgaaagang | tgtggagaag | 60 |
| tgcacagtag | tcgccagagc | ggntaaatgc | ngagtcntcn | ttcagttcct | cggnaaagcat | 120 |
| gggtnttaaa | aagacctcac | attgtgtntt | tccaagacag | cccagccctt | tgaaaatttn | 180 |
| tctttcaaaa | aagaggctgg | ggngcgaaat | atccctggat | ggtttaaacc | caagncttgg | 240 |
| ctggactgaa | ggccattgg | ggggtttttg | | | | 270 |

<210> 541

<211> 361

<212> DNA

<213> Mus musculus

<220>

```

<221> misc_feature
<222> (1)...(361)
<223> n = A,T,C or G

<400> 541
gtgctgtcac cctactgngg ncatcctgtt tgaacacacg actacctatc cctcaaccag      60
atcgtngcgc atantaatga agaaacacac aggaacaagt gctgaaaacc anattatnaa     120
gaacagcttg agcangggcc cgtgatagaa tgactcagcn aggtgttntt cactataaag     180
cntgaccggt acccacatgg ccagtaccac caacatccta ngaacctgaa tcctcccaaa     240
gacaggtgag cgctcgtgat tctctgagca gnaagggaat tttgttttgg gtcttatttg     300
ccagctgaga aaatgcaaat ggnatattca ttaagatgtn atgcggggag aaaaataaaa     360
a                                                                                   361

```

```

<210> 542
<211> 217
<212> DNA
<213> Mus musculus

```

```

<220>
<221> misc_feature
<222> (1)...(217)
<223> n = A,T,C or G

```

```

<400> 542
gcatactgga gtgatctggc atagactcat actgtgttag aaaagggagc ctggntcagn      60
cctctctggc aggctngcac ctntatnctt ccttcttggg atcaagacat gggattatcc     120
ttcctcctcc cccagggtct cacagcacag gccctgctct gtgtgagnga cctccttcag     180
agacacttgc cccatgcagc tcgatgggtt ctgggttt                                217

```

```

<210> 543
<211> 427
<212> DNA
<213> Mus musculus

```

```

<220>
<221> misc_feature
<222> (1)...(427)
<223> n = A,T,C or G

```

```

<400> 543
gactgagatg ttaaagtgac accaaggngag tagtgatggn ggtggntgga ggctgggtcat      60
ctaccttaac agcaaagaca ctaannagat gtntcaagat gctgcgccct ttaccgatgt     120
ctgagttgtc cacacttcca tcctgatgtc cttatgtggg tgaagatgat cccaacctgn     180
agccaacaca gaaaagccca taacctgtgg ncctcaccac ctctacagca ntgaaggtct     240
ccagngtcac cctgtggacc caccacaccc agctgaagaa ggctccagga gataacagag     300
atgggtggtc atcaggtcct ncaacttcct aaagatagga ctaacggggg gcctattatt     360
atcgggtgnc ctttctttgn tctttccatt attctgatca ttccaaatat taacccttta     420
aatactg                                                                                   427

```

```

<210> 544
<211> 362
<212> DNA
<213> Mus musculus

```

```

<220>
<221> misc_feature
<222> (1)...(362)
<223> n = A,T,C or G

```

```

<400> 544
ctgggacacag gccatagata cttcttgn gn aactctcaaa ngttggattg gatatcangg      60
ccgngntcat ancaaaagtc ngngcagnan gcctnctngn acgntcnang ncagggcngg     120
agacactgan cagcnatct ggcctcagca acnagcacct gacagtnngg acngtanaga     180

```

| | | | | | | |
|------------|------------|------------|------------|-------------|------------|-----|
| aggctctcac | ggctgcnatc | ggaggctgca | aacgccgagn | ttnnccggccc | agcaggtnaa | 240 |
| catatgggca | gcaatgctgn | ngctgtcacc | accaccacca | ccatagccac | tgtcaccacc | 300 |
| gaggatagga | agaaggactt | taaganaaac | cgatgnctgg | ctattgggat | acagggggac | 360 |
| ga | | | | | | 362 |

<210> 545
 <211> 235
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(235)
 <223> n = A,T,C or G

| | | | | | | |
|------------|------------|------------|-------------|-------------|------------|-----|
| <400> 545 | | | | | | |
| gggcacccag | acattctacc | tccaagaaac | cacgctacag | tcaccagata | aaagtggctg | 60 |
| ccacaggtca | cctggctgag | caacactgct | ggccagtcgg | aggttgcttg | ccagacagga | 120 |
| gctganccca | cctgcagcca | agccttccag | cactaagggtc | cccagcagtg | ggaagtactc | 180 |
| aaacnggntg | aanagccatc | aagggcnaaa | cttgagggggg | gggggggggcc | caaat | 235 |

<210> 546
 <211> 117
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(117)
 <223> n = A,T,C or G

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| <400> 546 | | | | | | |
| cgttaggggc | aaaaacccag | ggcaaggatg | ggaaaagcaa | gtactcgact | ctcagcctgt | 60 |
| ttgacaagta | taaaggagag | tcagcaggcg | cntgtcagga | aataaataag | agaata | 117 |

<210> 547
 <211> 206
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(206)
 <223> n = A,T,C or G

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| <400> 547 | | | | | | |
| gactgaggac | ggtacaccca | gcaagaagtc | tangcaggga | aataggcaan | actncanttc | 60 |
| ngtgaatatt | tcagnggtnc | tatgtgnagg | agccctgggn | tgtnctgaaa | cttgctctgt | 120 |
| ggaccaggct | gacctatgcc | tactgaatgc | tgggatgaaa | ggcagtgcac | caccactatg | 180 |
| cagcattttt | ttttttaaaa | gggcc | | | | 206 |

<210> 548
 <211> 239
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(239)
 <223> n = A,T,C or G

| | | | | | | |
|------------|------------|------------|------------|------------|------------|----|
| <400> 548 | | | | | | |
| gttaagaact | gttcagatac | cacgaagtca | tcatgtgacg | tgacagataa | gtgggttgga | 60 |

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| | | | | | | |
|------------|------------|-------------|------------|------------|------------|-----|
| gggcatggag | agctacgtcg | tgcccatcgt | catagtgcac | agaggggact | tgaccgtgtg | 120 |
| ccgctgctca | gactacatcg | tgccctgcaaa | cgctcctctt | gagccgccag | aatttgagat | 180 |
| cggtggcttt | acagaccaca | taaancgtga | cgatgggaat | ttccaccttg | gacccaag | 239 |

<210> 549

<211> 111

<212> DNA

<213> Mus musculus

<400> 549

| | | | | | | |
|-------------|------------|-------------|------------|------------|------------|-----|
| gactgagagc | tcagagacaa | ggaagcagca | gtcacactgg | gggccacaga | agggccctca | 60 |
| gtggcgctcca | tggctggcct | ggacccccaca | ctgagcacaa | gtcacccatt | g | 111 |

<210> 550

<211> 120

<212> DNA

<213> Mus musculus

<400> 550

| | | | | | | |
|------------|-------------|-------------|------------|------------|------------|-----|
| agcgtgaggg | ttcaaaaaagg | attcttctgct | ccaatgagat | catccttcca | gccagtggcc | 60 |
| tggtggagac | agagctccag | ttaaccaa | taagtttctc | aacatataaa | aattaaaaaa | 120 |

<210> 551

<211> 287

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(287)

<223> n = A,T,C or G

<400> 551

| | | | | | | |
|-------------|------------|------------|-------------|------------|------------|-----|
| caaccctgaa | cccacnacaa | tgacattatg | atggngcatn | tgaaaattca | ntcaaattct | 60 |
| ctaaaagatc | cagcctctgc | cttgaagatg | acctgctctg | aggagaatcc | aactgcnaat | 120 |
| tctgggctgg | gnaagangga | aatgggggct | tccagnncca | ttannngct | gttnccatnt | 180 |
| tgngcccccng | agcagngtga | gcgnnctncc | ctgnaagata | acccaaanna | tggggggcgc | 240 |
| angcgantga | aaaaaggaac | caattcctnt | caggggggatt | ttggagg | | 287 |

<210> 552

<211> 397

<212> DNA

<213> Mus musculus

<400> 552

| | | | | | | |
|------------|-------------|------------|------------|------------|------------|-----|
| atactccttg | cttagtttta | ggccattgac | tatgcagcct | agtgactgga | atgatgtgaa | 60 |
| aaaacctaag | tatggtcact | tgtcagagtc | tgcatctcaa | tatcaagaat | ctgttgacat | 120 |
| cctggagcta | ggtcatttta | cctgggacaa | atacctaata | gaaacatggt | cagtcccagc | 180 |
| gcctgtccat | tgttcaagc | agtcctacac | acctccaagt | aatgagttca | agatcagcat | 240 |
| gaaattggaa | gcacaggatc | ccaggaacac | cacatccacc | tgtattgcca | cggtcgttgg | 300 |
| attgacaggt | gcccgaacttc | gtctgcgct | tgatggcagt | gacaacaaga | atgacttctg | 360 |
| gagactgggt | gactcctctg | aaatccagcc | accgact | | | 397 |

<210> 553

<211> 277

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(277)

<223> n = A,T,C or G

<400> 553
actgaggaaa gaagangatg gagnagncgc cgaatctgag gccttggtc ccgtgtttgg 60
gaccaggagg gaaggagaga agatagattt cgctgagaca cttgcccggg tccctttgtg 120
ggtcagaatg ggtcccgatg agaacctgag tgtgagagtg aaactacgga gtatcatttg 180
tagctttgtt cctcaagact tgccatgaga tttaagtaga gcgcctgtgt ggaaattgtt 240
aattgtagct agtcagatcg aagactattg acagcat 277

<210> 554
<211> 109
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(109)
<223> n = A,T,C or G

<400> 554
tttgacctgc tcctgggaan ttgctgnntc gttaaaggcac tncnntatgg aactgcagca 60
gccnncaagg acagcatctg ctataacctc cagaccgtgg gggagggtct 109

<210> 555
<211> 215
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(215)
<223> n = A,T,C or G

<400> 555
ttcctacagt tccacctacc tcgtgtgtac aaagctgcc ccttncagnc ctcnnggctg 60
gnctcctgta ggacctgnga tcccacctcc ngactccagn tacnccanc tccacctga 120
anggggnctc tgctngccaa natatcanc ctgaattctc ctaacaaagg tgtactgtct 180
gactttatga ctgacntccc tgtaaccca ctttt 215

<210> 556
<211> 358
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(358)
<223> n = A,T,C or G

<400> 556
actgactgcg agtccccag ttcccctgga gatctagctg ggagcccagg ctgtgacaag 60
acacgcggct gtgcaaaggc ggtagacat tatggaggag acggtggaga agacagtgga 120
gcacctggag gcggaagtga cagggtctgct gggcctgctg gaggaactgg cttcaaacct 180
tcccacaggg cccttcagcc ccaaacctga cttgcttgga gatgatggtt tctgacttcc 240
agggatggtg gagcctgcca gctgaagtca tccctcanag aaccaagcca ggtcttcctg 300
ccttcctgcc ccacctttgt gtgaaataaa agctccgatt tggacccaa aaaaaaaa 358

<210> 557
<211> 471
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(471)

<223> n = A,T,C or G

<400> 557

| | | | | | | |
|------------|-------------|------------|-------------|------------|------------|-----|
| cacttttcac | gcaatgtccg | atcgtttggg | gcaaataacc | cagggcaagg | atgggaaaag | 60 |
| caagtactcg | actctcagcc | tgtttgacaa | gtataaagg | aggtcagtag | gcagctgtca | 120 |
| ggctctcagt | tattcctaga | catggcttac | agagtctcgg | gaaagttgcc | acantccggc | 180 |
| ggnngccacc | cgccctgcaaa | cctgccaagc | ctgaagtctg | aaaacaaagg | aaacgacccc | 240 |
| aacatcgtga | tagttcccaa | ggacgggaca | ggatggggcca | acaagcagga | ccagcaagac | 300 |
| ccaaagagtt | ccagtgtgac | ggcctctcag | ccgccggagt | cgcagncgca | gccggggttg | 360 |
| cagaaatctg | tctccaattt | gcagaaaccg | acacagtnta | tcagtcanga | gaacacaaat | 420 |
| ncagtgnacg | gtggaccaac | antcatgggc | nnaacagagt | acaagtagtc | g | 471 |

<210> 558

<211> 362

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(362)

<223> n = A,T,C or G

<400> 558

| | | | | | | |
|------------|------------|------------|-------------|------------|------------|-----|
| gactgagatg | ggaacagcac | atcgtcgttt | tggggggaagt | ctacaactac | tcctgtgaac | 60 |
| cagattcaag | aaacaatttc | tancanttgt | gtggtgatct | tctcaaaaac | atcctgctct | 120 |
| tactgttcca | tggccaagaa | gattttccat | gacatgaatg | tcaactacaa | ggctgtggag | 180 |
| ttggatatgc | tggaaatagg | caaccagttt | caagatgcgc | ttcacaagat | gactggggaa | 240 |
| agaaccgttc | ccaggatatt | tgtcaatgga | cgattttattg | gaggcgcagc | ggacactcac | 300 |
| aggcttcaca | aagaagggaa | attgctgcct | ctggttcac | agtgttattt | aaaaaaaaaa | 360 |
| ca | | | | | | 362 |

<210> 559

<211> 135

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(135)

<223> n = A,T,C or G

<400> 559

| | | | | | | |
|------------|-------------|------------|------------|------------|------------|-----|
| ggatgccctt | gggggggttcg | tgtatcgngg | ggtcaatgct | ctacaggcca | nantcaccct | 60 |
| tattgaaagg | gangtncctc | cacctttngt | tcatggcana | agantataag | ntganagctg | 120 |
| tctgcggttc | ccttt | | | | | 135 |

<210> 560

<211> 174

<212> DNA

<213> Mus musculus

<400> 560

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| gaactgaggt | attctcatgg | gagcagtaat | aaaagttata | gagtttataa | agctggcaaa | 60 |
| ttggaaggag | gaagaaatgt | ttcgccccaa | catgtttttc | cttctcttgc | tcccacctat | 120 |
| tatctttgag | tcaggatact | cactgcacaa | ggggaacttc | tttcagaaca | tcgg | 174 |

<210> 561

<211> 300

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(300)
 <223> n = A,T,C or G

<400> 561
 atctctactg cctccaacac gccgaatcct ggctganctt ttacagcaaa cagccaactg 60
 gaacaagatg aatgtggaac agtaccctgc ccctctggag tgttataatg agttgggaca 120
 tgtctctgta gaaagatttg cccaactttg tcaggaactc atggatacac taagggaat 180
 aaggcagccc aagagcctct cttttgctac acgtatatgc cacaaatgtg gcgagccctg 240
 tgtctatggt caggggggta gactttgttt ttgctggcgg ngaacatgga ttcagaactt 300

<210> 562
 <211> 192
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(192)
 <223> n = A,T,C or G

<400> 562
 atttcgcaac tgaaacttgc aatcatttca gggccatacc cattaaacaa gcacagtgcc 60
 aggtaaaaatg acaggcgaaa ctgcatccat gaatttacgg agggactatt tggttttcat 120
 ttantacttt taccacctca ttttatgtct ccggcaaagc caaaggaacc aaacttactt 180
 taaaaaaaaa aa 192

<210> 563
 <211> 359
 <212> DNA
 <213> Mus musculus

<400> 563
 ctccaacctg tcaagttggt ggagatcctg caatcgccgc cgccgctgca gcagtcctga 60
 aagcggcaga gccatgcagt gagcacatcc agcgaccgcc ggccccacag aggaaggctc 120
 cagcctggaa aggaaatgct atgagatggc aagataggga caagagagac agtcctgagg 180
 ttctcagtg tgacagcgcc caaaccagag ttcagggtccc aactcacagc caggttcctt 240
 cgtacgcccc agcgcttcct ctctaagcct tagaagtgaa agtatctggg ggttgggaca 300
 atcaccaagt atgtctacaa acggctttcc ttaaaccatc atcaataaag cgagcaaga 359

<210> 564
 <211> 327
 <212> DNA
 <213> Mus musculus

<400> 564
 ggcaggcaca gctcctctgg cagacgtagg tcctgggtgga aacgggggttc aggggactcc 60
 gcagccttca ccagcatgag ccatccagag gagtcaacag aggtgacact gaagactgac 120
 gtggagtcag gagccagtgg ctacagtgtc acagggtggag gggatcaggg gatctttgtc 180
 aagcaagtac tgaaggactc gtcggctgca aagctgttca acctgagaga aggagatcaa 240
 ctgcttagtg cgaccatatt ctttgaccat atgaaatatg aagatgctct taaaatcctt 300
 cagtactcag aaccatacaa agttcag 327

<210> 565
 <211> 119
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(119)
 <223> n = A,T,C or G

<400> 565

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| tgtaatggaa | tccgatgtcc | tcttctgggc | tgtctaagag | atctacagta | aataagtaag | 60 |
| taaaaaagaa | ggaaagaaa | acaagaaaag | ganagtgaat | gaaagatttt | ttaaaaaaa | 119 |

<210> 566
 <211> 125
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(125)
 <223> n = A,T,C or G

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| <400> 566 | | | | | | |
| agatccccaa | ctcccaccaa | nagccagctt | tangtgtnnt | aangacagta | cnaccatcga | 60 |
| gcatggtngc | tcctctgnat | gnngggagat | gatgactgtc | ncattgctgt | gtgatggcct | 120 |
| ggaat | | | | | | 125 |

<210> 567
 <211> 362
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(362)
 <223> n = A,T,C or G

| | | | | | | |
|------------|-------------|------------|------------|------------|------------|-----|
| <400> 567 | | | | | | |
| gggatcgttt | gcctaagatg | cgaccatgcc | atccaggctt | ctccacaccc | tggaagttt | 60 |
| acacagcata | tcaagcaaag | gctcatcagt | gccagagact | tacttggtt | acattaagac | 120 |
| cacttaggaa | atcctngaaa | gtacattttt | gccacagggg | gcctgacaat | acangctaca | 180 |
| ttgacnctnn | ttatttgcac | cntatgncng | ntgancagtt | cgganncggn | ncanganata | 240 |
| cctggaaang | anncgataa | catcangaca | caagccagac | tctttgtcgn | taaangctag | 300 |
| ncatnnggt | tggaacngcna | aaaacaccng | ncaagncnnt | gcnccccctt | ttgggaatca | 360 |
| ca | | | | | | 362 |

<210> 568
 <211> 186
 <212> DNA
 <213> Mus musculus

| | | | | | | |
|-------------|------------|------------|------------|------------|------------|-----|
| <400> 568 | | | | | | |
| gaccggagct | ggctgaggat | ccaggcagga | gctgtgcagc | atctgagtca | ggctcgctct | 60 |
| ctcccacacc | ccagagccga | cctgcctgaa | cattcgaggt | tattcttagt | aactctcagg | 120 |
| tttcaactcta | gcacactgag | catgctcaag | tggttaaata | cagaaatctg | tttttaaaaa | 180 |
| aaaaaa | | | | | | 186 |

<210> 569
 <211> 101
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(101)
 <223> n = A,T,C or G

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| <400> 569 | | | | | | |
| acctgactga | gacatgcagc | ttccctgtgc | ntcactaggc | caccaggata | tccacctgtn | 60 |
| acctcnctg | gataaatgtt | tctgttttgg | aaaaaaaaa | a | | 101 |

<210> 570

<211> 137
 <212> DNA
 <213> Mus musculus

 <220>
 <221> misc_feature
 <222> (1)...(137)
 <223> n = A,T,C or G

 <400> 570
 tattctcaga ggaatagggg agaattnagg aaaatctggn atttcctacc nngaccangc 60
 nncagaagct tcccacannc ntgtaggcat tgccgctcat caggaagtcc cgtcttacgg 120
 aagccagtta tcactta 137

 <210> 571
 <211> 412
 <212> DNA
 <213> Mus musculus

 <220>
 <221> misc_feature
 <222> (1)...(412)
 <223> n = A,T,C or G

 <400> 571
 tgagcctgat gatagcagat cttaatgatg gaaggtacac gcccatgcan ccttgtgaan 60
 caactgggac cacanggnca nagagtcccn tgataccan gtntcatttn ctcaaggacc 120
 cagcagactg aggacatctg caaaattcct aaggctagag ngaaagacta cagngaactc 180
 taacacccca gcaaggtccc accttctcct atcagagcta cgggacaccc aacctgggcc 240
 gcacgcagtc ttctctgcag ttgggacagg nnnntnntct gnccttgntt tcccacagcc 300
 ngtttttcan nncnanaatt nccatgctng tggggccctg nattttagna natnntggan 360
 cannctgtnc ctgggcggnc cccagcgctc acctggaaca gaggggagcc ca 412

 <210> 572
 <211> 426
 <212> DNA
 <213> Mus musculus

 <220>
 <221> misc_feature
 <222> (1)...(426)
 <223> n = A,T,C or G

 <400> 572
 ggagctgggg agaaggtgaa ggcttgccat gntcannctg gcccaagcca ttccaggagc 60
 tatctttngt tactattgct gtgataaaac acctgacca aaggcaaggt ggagaangan 120
 gggttnattt caacttacaa ctcttggttg actccatcac tganaggatt tgaggcataa 180
 actcaaggaa caaacctang aggtaggaaac tggangacat gggctnggag aagactgctc 240
 ttactggttt ggtncnctatg gtttgcccag ggtgctttct catacaactn aggaccacc 300
 ncgnagnngg gccagaggtg caccacccgt ctgtaactcc agnttcaggg gataatctga 360
 tacctctttt tggctccaag aacangcagg catatacaca taaatgcagg gcaaaacatt 420
 catacg 426

 <210> 573
 <211> 767
 <212> DNA
 <213> Mus musculus

 <220>
 <221> misc_feature
 <222> (1)...(767)
 <223> n = A,T,C or G

```

<400> 573
gtactgctca aacggacctt cgaggacaga ttgcggagcg tctactcgag acagcagggt      60
gacaagtctg cctccagttc tctcactggt ggatcttgag acaacaggaa aatgacttcc      120
catgacccaa aggcgcgtcac tcgcagaacc aaggtggctc ccaccaagag gatgagcagg      180
ttcttgaaac actttacggt ggttggggac gactaccaca cgtggaatgt caactacaag      240
aagtgggaga atgaggagga ggaggaggag ccagcgccca catcagcaga ggtgagggc      300
aatgctgcgg gccagatgc cgaggctggc tctgcctcca cgcccaggca gtccctggac      360
ttcaggagcc gactgaggaa actcttcagt tcccacaggt ttcaggatcat catcatctgc      420
ctggtgggtcc tggacgccct cctcgtgctt gctgaactcc tcctggattt gaagatcatc      480
gagccggacg agcaagacta tgccgggtcac ggcgttccac tacatgagct ttgccatcct      540
ggncctcttc atggtgggag anttttttta agatcttcgg cttncgctta gagttctttc      600
accacaaagt ttgagaaacc tggatgcctt tgtggtggng gggcttttnc gtccttgacc      660
tttggctntt gttaaaagcc cccctctcna aactcttngg gttgctnanc tgctttctnc      720
tttnaggggg gcccccctta ccaccgggnt ctccatctcc gggaaaa      767

```

<210> 574

<211> 456

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(456)

<223> n = A,T,C or G

```

<400> 574
ccttgtaaat gcaatggctg gaagacccta acccctctcc tactccacca agaggagacc      60
tgcagcagat aattgtcagt ttgacagaat cctgtogaag ctgtagccat gcccttgctg      120
ctcacgtttc tcaactggag aatgtgtcag aggaagagat ggacagactc ctgggaattg      180
ngttggatgt ggagtacctc ttcacctgcg tccacaaaga agaagatgca gataccaaac      240
aagtgtactt ctacctattc aagctcttga gaaagtcaat tttannaaga ggaaaacctg      300
tggttgaagg ctccttggag aagaagccgc catttgagaa gccagattt gaacagggtg      360
tgaacaactt cgtgcagtac aagtttagtc acttgccatc gaaagaagag gcaggacanc      420
gatccgagct ggcccaagat gtttctgaac cgcatt      456

```